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Arabian archaeology and epigraphy

Hunting in pre-Islamic Arabia in light of the epigraphic evidence

The hunting of wild animals for food, sport or for the defence of people and herds, was common in the ancient Near East, especially in early times. This paper gives a survey of hunting practices in pre-Islamic Arabia primarily from the beginning of the first millennium BCE to the eve of Islam in light of the epigraphic evidence and of rock art as well as archaeological discoveries.

Keywords: hunting, pre-Islamic Arabia, rock art, ancient South Arabian inscriptions, desert kites, ancient North Arabian inscriptions

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Introduction

No accurate or systemic studies of hunting in pre-Islamic Arabia have been carried out that consider the epigraphic and pictographic evidence. The purpose of this study is to present a general view of hunting in pre-Islamic Arabia. This study depends primarily on the epigraphic evidence gained from the ancient South and North Arabian inscriptions as well as the pictorial record of hunting. Several aspects will be discussed in this study. After a brief presentation of the sources, the hunting scenes, hunted animals, the hunter and his tools, the purposes of hunting and the social context such as food, ritual hunt, individual hunt and sport as well as the royal hunt will be discussed. Finally, hunting technology, such as the long walls and enclosures or the so-called 'desert kites' or animal traps, will be considered, especially the rock drawings of such animal traps. This study will try to relate the petroglyphs to the inscriptions, but it is not within the scope of this paper to analyse the rock-art theories.

I. Sources

Several sources are available for the study of hunting in pre-Islamic Arabia, including rock art, representations of hunting in relief panels, pre-Islamic Arabian inscriptions, classical Arabic sources, ethnographic data, desert kites and archaeological investigations.

Published data on hunting in Arabia is already available from prehistoric rock art dating from the Neolithic age onwards (Khan 1993; 2013: 447–475; Anati 1972, 1974; Wilkinson 2003: 178–179).

Ancient North Arabian Inscriptions, such as Taymanitic, Thamudic including Hismaic/Thamudic E and Safaitic, provide us with some good data on pre-Islamic hunting in Central and North Arabia. In particular, the Safaitic inscriptions and the associated rock drawings give us very significant information about hunting in Bādiyat al-Shām (al-Khreyshah 2004: 195–206; Eksell 2002: 80–106). There are hundreds of rock drawings of animals, primarily associated with Safaitic inscriptions (al-Khreyshah 2002; 2007: 9–28). Even if these inscriptions do not always directly mention hunting practices, these drawings should nonetheless be considered as hunting scenes. Furthermore, hunting scenes are often associated with the Thamudic inscriptions of North and Central Arabia, especially among the so-called Hismaic (or Thamudic E) inscriptions (King 1990; Corbett 2010: 151–157; 2012: 174–190).

Rock drawings and relief panels are of great importance for understanding hunting in pre-Islamic South Arabia (Inizan & Rachad 2007; Jung 1994: 135–156; McCorriston & Martin 2009: 238–239). In addition to numerous hunting-scene reliefs discovered in Yemen, there are also many hunting scenes associated with South Arabian inscriptions that have been discovered among rock carvings in Yemen. Rock drawings and reliefs as well as Ara-

bic sources provide valuable data about hunters and their tools.

Arabic sources provide information about hunting in the early Islamic period (Viré 1997: 98–99; Ibn Manglī 1984). For example, we have some good data from Arabic sources such as *al-Maṣāyid wa-'l-maṭārid* 'Trapping and hunting down' by Kušāğim (d. *c.*961 CE; Kušāğim 1954) and *Uns al-malā bi-waḥš al-falā* 'Relations of the leading men of this world with the wild beasts of the endless deserts' by Ibn Manglī (died 1384 CE; Ibn Manglī 1984, 1993). In addition, pre-Islamic poetry is a very significant source for hunting in pre-Islamic Arabia, especially the *ṭaradiyya*; or 'hunting poem'.[1]

Ethnographic materials also offer an insight into the continuity of hunting practices in Arabia through time. Both European travellers (Musil 1928: 26–27; Fowden 1999: 107–136) and Arab authors such as Ǧ. Ǧabbūr (1988: 284–297) provide valuable observations concerning traditional hunting methods used in North Arabia (see also Fowden 1999: 107–136).

Key sources of data for this study are pre-Islamic Arabian inscriptions, primarily the ancient South Arabian inscriptions and in particular the Sabaic and Qatabanic evidence. These inscriptions, discovered primarily in Yemen, date from the beginning of the first millennium BCE until the eve of Islam. Among the thousands of inscriptions, there are approximately thirty known hunting texts (Ryckmans J. 1976a: 259–308; Sima 2000/2001: 84–109). Some of these texts give us substantial information about hunting and the organisation of hunting campaigns.

Knowledge about ancient hunting techniques and practices has been revolutionised by the use of Google Earth imagery to discover thousands of so-called 'desert kites', which are found from Uzbekistan to Yemen and the West Oasis in Egypt (Crassard *et al.* 2014). Of great interest in this regard are several rock drawings of 'desert kites' that have been discovered in association with Safaitic inscriptions, examples of which are presented in this paper (see also Picalause *et al.* 2004: 95–96; Ababneh 2005; Crassard *et al.* 2014).

A number of the sources listed above provide reliable evidence of the animals that were hunted in Arabia, including ibex, gazelle, wild ass, the Arabian oryx, etc. Some data can also be gained from the recovered bones of wild animals, although no solid information is available from Yemen. Recent archaeological investigations, however, give us some data on wild animals including gazelle, birds and rabbit (Lewis 2005a: 281–282; 2005b: 133).[2]

II. Hunting scenes

Data on hunting scenes are gained primarily from rock art that have been discovered in all parts of Arabia, as well as monumental reliefs recovered primarily from South Arabia (Figs. 1 & 4). There is considerable variation in the quality of the rock drawings, and much of what we are able to interpret from the episodes is dependent upon the abilities of the artist (Figs. 4–6). Although there is no accurate comprehensive survey of these hunting drawings, the number might be estimated in the thousands. In addition, many images of individual wild animals appear on petroglyph panels throughout Arabia.

As early as the Neolithic, wild beasts such as the ibex are depicted widely across Arabia, including North Arabia, Yemen and Oman. These animals continued to appear on petroglyph panels after the Neolithic, but more often as single images rather than as the subjects of hunting scenes (Khan 1993). This may imply that hunting declined in importance as pastoralism increased, or perhaps that some of these wild animals came to serve as religious symbols for particular groups; perhaps there was such a symbol in ancient Yemen.

There are some good examples from rock art and reliefs in ancient Yemen (Figs. 1, 7 & 8). Frequently, Yemeni rock art shows various hunted animals and individual hunters represented on one panel (Inizan & Rachad 2007). In these scenes, the hunters appear to act in concert, as they might in an organised chase (Fig. 4). Likewise, these panels often depict hunting dogs that together surround the prey (Figs. 2, 3, 4, 11, 17, 18).

The animals most often depicted in early South Arabian architectural and sculptural art are the ibex, the bull and the Arabian oryx (Antonini de Maigret 2012: 29–31). Some examples are shown below.

Frieze with wild animals and acacia trees

The calcite-alabaster frieze is divided into two opposing scenes (Fig. 1). The landscape is rich in flora and fauna, including acacia trees, birds and rabbits. A cheetah is shown leaping from a low stone onto the hindquarters of

[1] There is an enormous number of studies on *ṭaradiyya*, see for instance aṣ-Ṣāliḥi 1981; Stetkevych 1996: 102–118; Seidensticker 2000: 223–224; Bauer 1992. On hunting in North Arabia in the sixth century CE, see Shahīd 2009: 238–249.

[2] F.G. Fedele has provided some useful information on faunal remains in Yemen (1992: 49–93); see also McCorriston & Martin 2009: 240–241.



Fig. 1.
A frieze with wild animals and acacia trees, Yemen (courtesy of Walters Art Museum, Baltimore).



Fig. 2.
A hunting scene, Radāʿ, Yemen (courtesy H. David).

an ibex. In the opposing scene, a lion attacks a gazelle (Schulz & Foster 2007: 122).

Hunting scene from the area of Radāʿ, Yemen

This hunting scene was discovered in the area of Radāʿ (Antonini de Maigret 2012: 16) and is possibly dated to the first–third century CE.[3] It shows a hunter aiming his bow towards an ibex, which is attacked from the back by a hunting dog. A gazelle is depicted above the scene, while below another ibex and a bull are depicted. It is difficult to determine the personal names carved in association with the drawing. The upper inscription, which reads: (1) *mʿdʾl / bn / ykrb*, may belong to the hunter who is depicted, while the others, which read (from top to bottom) (2) *mrṯdm*, (3) *mls²n / bn / ʿmym*, (4) *s²rḥ*, (5) *yṯʿn*, (6) *rtʿm*, (7) *yṯʿn*, may identify other hunters.

Hunting scene relief from the temple of Banāt ʿĀd

This hunting scene relief comes from the temple of Banāt ʿĀd in the Yemeni Jawf and is possibly dated to the seventh–eighth century BCE. It shows a group of men hunting rows of different animals: ibex, gazelle and onager (Fig. 4). The panel's background features square-pattern cross-hatching that may represent a net (Arbach & Audouin: 2007: 103–107; Antonini de Maigret 2012: 36).

[3] Drawing by M. Maraqten after a photograph by H. David-Cuny.



Fig. 3.
A hunting scene, Radāʿ, Yemen (drawing M. Maraqten).

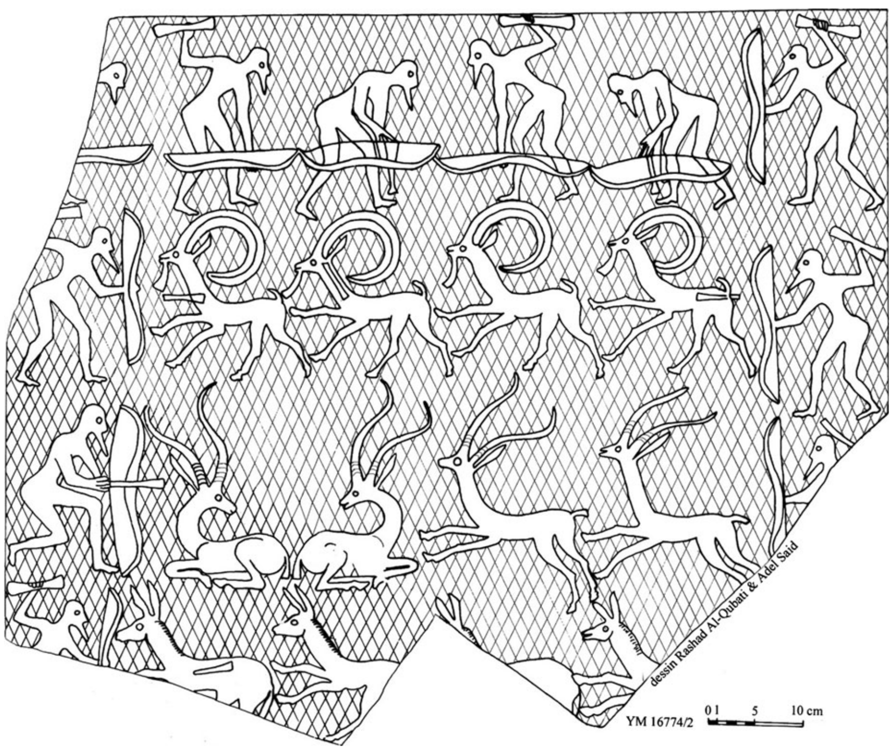


Fig. 4.
A hunting scene relief from the temple of Banāt ʿĀd, Jawf, Yemen (YM 16774, Ṣanʿāʾ National Museum).



Fig. 5.
Hunting scenes from Umayma, Dhamār area, Yemen (courtesy of K. Noman).

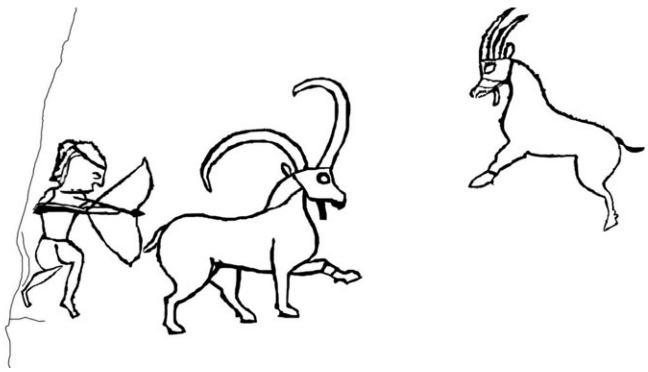


Fig. 6.
Details of ibex hunting; hunting scene from Umayma, Dhamār area (drawing M. Maraqten).

We do not know if this hunting practice was related to the rituals of the temple of Banāt ʿĀd.

Hunting scenes from the area of Dhamār, Yemen

These hunting scenes are from the site of Umayma, near Hakar in the area of Dhamār and are possibly dated to the first–third century CE.[4] Three different hunting scenes are depicted on the face of the rock. They may belong to the same artist, since the style and features of the respective carvings are quite similar (see also below).

A report on a hunting expedition in Wadi ʿAbadān, Yemen

A very significant source is the corpus of ancient South Arabian inscriptions and especially those inscriptions that

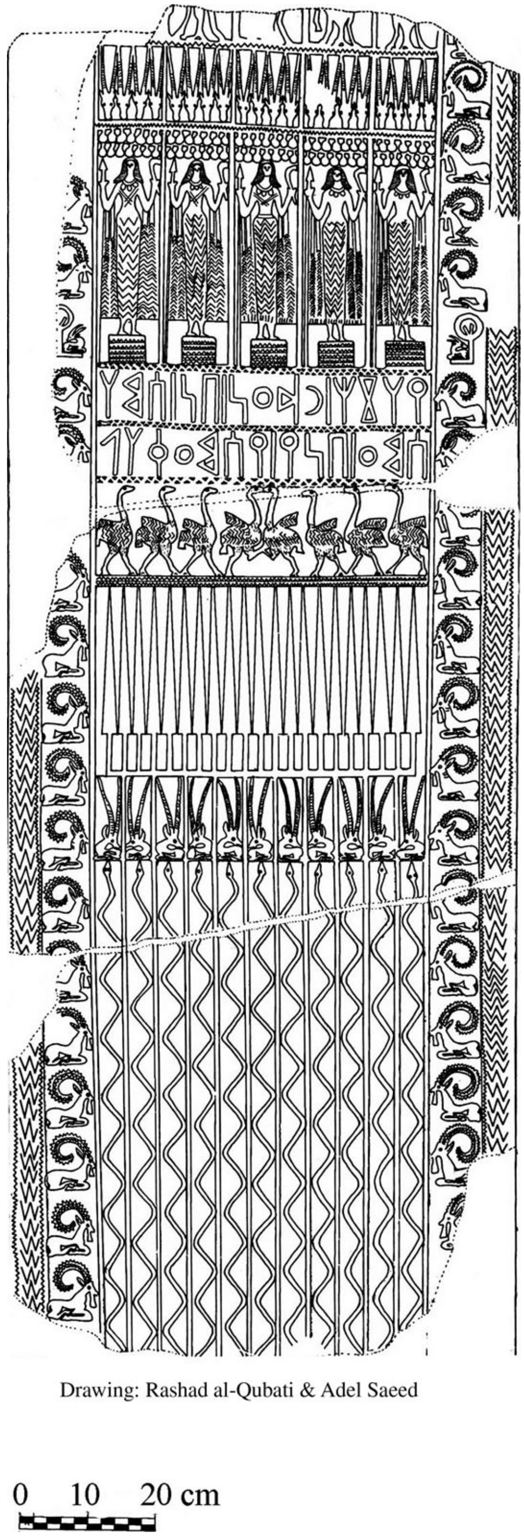


Fig. 7.
A drawing of a pillar of an intra-muros (?) temple at Kamnā, Jawf, Yemen (al-Jawf 04.6, Ṣanʿāʾ National Museum).

[4] I am grateful to Dr Khaldon Noman, University of Dhamār, for sending me these photographs.

describe hunting campaigns, such as the inscription known as Abadān 1 (Robin & Gajda 1994: 113–137; Müller 2010: 50–54, 470 himyaritic = 355 CE). The relevant passages from this inscription read:

Transcription

1. *mls^{2}n / ʾrym / w-bnyhw / ḫwlym / yzd / w-s^{2}rḥbʾl / ʾm[r]r / w-mʿdkrb / [. . . . . .] w-mrṯdm / ʾm[..] / bny / mls^{2}n / w-brlm / ymgd / w-ḫwlym / yzd*
2. *w-s^{2}rḥbʾl / ʾ[. . .] / bny / mʿdkrb / ʾlht / yzʾn / w-ylġb / w-kbrn / ʾqwl [. . . . . . s^{2}ʿbn / ms^{2}rqn /] w-ḍyftn / s^{1}ṭrw / w-rṯṯd / bḏn / ms^{3}ndn / kl*
3. *ʾʾrḫm / w-ṣ[ydm]* / (. . .)

37. (. . .) *w-ṣd*
38. *w / ʾʿrr / ḥgr / w-ʾrḍ / s^{1}ybn / w-ʾqww / ʿlyn / w-grdn / w-ʾrḍ / ḍyftn / w-ʾʿrr / ks^{2}r / b-ṯmny / mʾtm / ʾs^{1}dm / wḫms^1 / mʾtm / klbm / bʿdn / k-wdʾw / wʿl / w*
39. *ḥns^2 / ʾʿrr / qrb / ʿbdn / w-ṭrdw / ʿly / ʾfrs^1-hmw / bqr / rynm / w-ḥwry / w-ʾfrʾ / ʾs^{1}wṭn / w-dtnt / w-ʾḥwr / w-ḍlnn / w-hrgw / bqrm / w-ḥwrym / w-ʾfr*
40. *ʾm / w-ʾwʿlm / wʾnmrm / wkl / ḥns^{2}m / s^{2}fqm* (. . .)

Translation

1. Malšān Aryam and his sons Ḫawliyyum Yazad and Šuraḥbiʾīl Amrar and Maʿdīkarib [. . . . . .] and Maraṯadum [..], sons of Malšān, and Barīlum Yamgud and Ḫawliyyum Yazad
2. and Šuraḥbiʾīl [..], sons of Maʿdīkarib of (the clan) Yazʾan and Yalġub and Kabirān, the tribal leaders of the [tribes Mašriqān] and Ḍayfatān, have engraved and committed in this inscription all of the
3. great performances and hunting expeditions (. . .).

37. (. . .) and they carried out hunting expeditions
38. in the mountains of Ḥagar, in the land of Saybān, in the desolate regions of the high lands, in Girdān, in the land of Ḍayfatān and in the mountains of Kaššār with eight hundred warriors and five hundred dogs after having beaten ibexes and
39. other game toward the mountains close to ʿAbadān, they hunted on their horses Arabian oryx antelopes of (region) Raynum, as well as addax antelopes and onagers of ʾAṣwatān, of Datīnat, of ʾAḥwar and of Ḍallān and they killed the Arabian oryx antelopes, addax antelopes, the onagers,
40. the ibexes, the leopards, and all types of game in abundance.

Hunting scenes in Central and North Arabia

In general, hunting scenes known from rock art in Central and North Arabia show more or less the same elements. Frequently, one or more hunted animals shape the focus of the scene. The hunter is commonly presented standing behind, preparing to shoot his weapon. In many cases, hunting dogs are shown surrounding the animal and occasionally even biting it. These scenes inform us not only about the hunting weapons that were used, but also the dogs that assisted in the hunt and the varieties of animals that were hunted. The wild animals, the hunters, their dogs, together with the weapons used (often bow and arrow) all document a single hunting episode (Fig. 18). These hunting scenes may actually represent real hunts and the hunters who participated in them. If so, the hunters may have even dispatched lions with spears (Khan 1993; 2013: 447–475).

There is also good data from the hunting scenes drawn by the ancient Bedouin of Bādiyat al-Shām who signed their drawings with Safaitic inscriptions (al-Khreyshah 2002: 164–172; 2007: 9–28). Hunting scenes are to be found in almost all publications of Safaitic inscriptions (CSNS 972, 1190; Ababneh 2005; Ḥarāḥšeh 2010: 242).

Unfortunately, however, the Safaitic inscriptions, like the Thamudic and Hismaic (Thamudic E) texts that sign hunting scenes, rarely give details about hunting activities (King 1990; Corbett 2010: 162–163; 2012: 174–190). In general, the authors, in addition to inscribing their name and patronymic, provide the designation of the wild animal being chased or a short note that they engraved the whole of a scene (Ḥarāḥšeh 2010: 214–219). Scholars of Safaitic, Thamudic and Hismaic (Thamudic E) inscriptions do not always relate the inscriptions to the associated drawings (Corbett 2010: 162–163). This would give us some useful data about the subject of a hunting scene. The problem is how to translate the particle */ l /* or the so-called *lam auctoris.* Most of the Safaitic inscriptions begin with / *l* / that has been designated as *lam auctoris*. The accurate meaning of this / *l* / has been a topic of much discussion. According to scholars of Safaitic studies it can mark authorship and it is common among scholars to translate it as 'by' (see discussion in Macdonald 2006: 294–295; Al-Jallad 2015: 145; see also critical discussion in Eksell 2002: 115–118). This is followed by several scholars, for example, S. al-Theeb (2003: 29–32) who translates the *lam auctoris* in various studies as *bi-wāsiṭat* x', which in Arabic has the precise meaning of 'by the means of, through, by, per, on the part of x' (Wehr & Cowan 1976: 1067).[5] In many cases, inscriptions that

[5] In general, the authors of inscriptions accompanied by drawings of hunting scenes seem to have been engaged in hunting and they declare their ownership of what they have hunted. These texts have been understood as a declaration of ownership by K. Eksell (2002: 39–49), al-Khreyshah (2007: 9–28) and others.

relate to hunting scenes begin with */ l /*. Thus, this particle may express that the drawn animals were hunted by the person who carved the inscription, the drawing and inscription being an occasion to demonstrate the author's/hunter's success (e.g. Fig. 20/e) and might be understood as '(inscription) of x; (possession) of x; [this] belongs to x' and not as 'by'.[6] In ancient North Arabian inscriptions relating to hunt practices, this / *l* / might have a possessive function and is to be understood as *lām al-milkiyya*.[7] There are many cases, however, in which only the hunted animal or wild animal is depicted, without any indication of a hunting scene or narrative.

III. Hunted animals

Animals were central to the life of the people in ancient Arabia, functioning as sources of food, raw materials, transport and as important symbols. Several terms are used to designate hunted animals, including *ṣayd* (Lane: 1752), *qanṣ* (Lane: 2568) and *ḥayawān al-waḥš* (Lane: 2928–2930). Several terms are used in the meaning of 'animals, hunted wild animals' (Sabaic: *wḥs², ḥns²*; Safaitic: *ḥyt*). In South Arabian inscriptions, two general terms, *wḥs²* (MB 2006 I-16) and *ḥns²* (ʿAbadān 1/40, see below), are attested with the meaning 'hunted wild animals, game' (lit. 'wild').[8]

South Arabian inscriptions mention several hunted animals by name, but some early Sabaean inscriptions from Yalā near Maʾrib, which recount hunting campaigns, do not mention the names of hunted animals, but only the names of the places where animals were hunted and how many were taken (Beeston 1991: 53).

Ancient North Arabian inscriptions contain good information about the names of hunted animals, especially those that reference associated rock drawings. Safaitic inscriptions often use the term *ḥyt* to refer to 'animals, hunted wild animals' (Ababneh 2005: 398; al-Khreyshah 2004: 195–206; Ḥarāḥšeh 2010: 39, 108, 354; Al-Jallad 2015: 203) and, in many cases, provide the name of the individual animal being pursued. The following provides a brief overview of various animals that were hunted in ancient Arabia.



Fig. 8.
The pillar of an intra-muros (?) temple at Kamnā, Ṣanʿāʾ National Museum (al-Jawf 04.6, photograph M. Arbach).

Nubian ibex

The Nubian ibex (*Capra ibex nubiana*) inhabits the arid regions of the Middle East and North Africa (Ar. *waʿl*, pl. *awʿāl, badan*). It is described as a type of wild goat whose ancient habitat extended from the southern Levant to the Arabian Peninsula and Africa east of the Nile. The Asiatic variety even extends to Afghanistan and eastwards into Mongolia. The horns are slender and curved back (Collins 2002: 13). The animal's numbers have declined in recent centuries and its existence is now threatened across the Middle East. As the ibex tends to live in extremely rough, mountainous terrain, it is traditionally considered to be one of the most difficult game animals to hunt.

The ibex (Ar. *waʿl* 'ibex'; South Ar. *wʿl,* pl. *ʾwʿl* 'ibex, mountain goat') is the most documented animal in pre-Islamic Arabia, particularly in ancient Yemen (Figs. 1–9). It is evidenced widely in inscriptions and rock art (Avanzini 2005: 144–153; Antonini de Maigret 2012: 29–36),[9] and served as a symbol of the moon deity (i.e. the main Sabaean god Almaqah) in ancient South Arabia (Fig. 9).[10] The ibex, however, was most frequently mentioned in ancient South Arabian inscriptions as a game animal

[6] A.F.L Beeston translates *lam auctoris* as '(inscription) of X' (see discussion in Beeston 1990: 18).

[7] On the Safaitic inscriptions that express ownership, see for instance *l ḥrb bn lḥy hdr* 'This camping-place belongs to Ḥarb son of Luḥay' (Ababneh 2005: no. 397). See also the discussion in Al-Jallad 2015: 77, 145.

[8] On the names of wild animals in the Arabic tradition, see Hommel 1879; al-Aṣmaʿī 1888; Ibn Manglī 1984; Ǧabbūr 1988: 84–102.

[9] On the term *ʾrwy* 'the female mountain goat, ibex', see Sima 2000: 25.

[10] The Almaqah temple in Ṣirwāḥ, west of Maʾrib, Yemen, is called 'the ibexes of Ṣirwāḥ' (*ʾwʿl ṣrwḥ*), see Serjeant 1976: 77–79. It is unclear why this name was applied to this temple, but it might have been related to the hunting of the sacred ibex of Almaqah.



Fig. 9.
An ibex frieze, Awām temple/Maḥram Bilqīs (AFSM photo archive).

(Sima 2000: 159–168; e.g. Sabaic, ʿAbadān 1/40, Naqīl Kuḥl 1, MS Šiğāʿ 1, Ḥaḍramitic, Ingrams1).

Of particular relevance for understanding the ibex in ancient Yemen is the traditional ibex hunt in Ḥaḍramawt, which some have suggested goes back to the pre-Islamic period. This ritual hunt has been studied in detail by several authors (Serjeant 1976: 25–56; Rodionov 1994: 161–165; 2007: 110–113; Bin ʿAqīl 2004).

Although the gazelle (see below) was the favoured and most attested hunted animal in Central and North Arabia, the ibex (*wʿl*) is also often attested (aṣ-Ṣāliḥī 1981: 107–110). The ibex (*wʿl*) is mentioned frequently in Safaitic inscriptions. In the Safaitic regions, however, the ibex was not very common, gazelle being far more common (Ababneh 2005: 73–74; WH 2831). By contrast, the ibex (*wʿl*) is the most common hunted animal featured in the Hismaic (Thamudic E) hunting scenes from the Jordanian Hismā (Corbett 2010: 152–153). Additional information about the ibex hunt is available from Oman, particularly from Dhofar (al-Šaḥrī 1994: 213; ElMahi 2000: 40–45), Wadi Saḥtan and Wadi Bani Kharūṣ (Jäckli 1980: 22, 93–94, 96).

Evidence suggests that the ibex was hunted by using hides and so-called desert kites (see below). In the case of the latter, once the ibex had entered the stone enclosure, it was attacked and killed by hunters using knives and sticks. In Oman, hunting nets were also used to trap and catch ibex (ElMahi 2000: 37–38).

Gazelle

All over Arabia and in the Bādiyat al-Šām the hunting of the gazelle (*Gazella Arabica,* Ar. *ẓabī, ġazāl, rīm*; Viré 1991: 1036–1038, South Ar. *ṣby*) was practised and remained as a dominant economic activity, perhaps from Neolithic to the Bronze age and continued to be practised until recent times (aṣ-Ṣāliḥī 1981: 100–107; Ğabbūr 1988: 85–87). The dorcas gazelle (*Gazella dorcas*, Ar. *ʿafrī*, *ḥimrī*) was also common.

Although gazelles are well documented in reliefs and rock art in ancient Yemen (Figs. 1–4), they are rarely mentioned in the inscriptions (Sima 2000: 168–172). The gazelle (*ṣby*) is mentioned in two texts, one Sabaic (Ry 544/) and one Ḥaḍramitic (Ja 949).

Gazelles were the animal most frequently hunted with traps and desert kites. The goitered or black-tailed gazelle (*Gazella subgutturosa*, Ar. *rīm*) seems to be the most hunted gazelle in Bādiyat al-Shām using the kite technique for hunting (Holzer *et al.* 2010: 9). Gazelles were probably the principal source of protein for prehistoric hunter-gatherers in the southern Levant at the close of the Pleistocene (Collins 2002: 23).

In Central and North Arabia gazelles were the most commonly hunted animals. The term *ẓby* (= Ar. *ẓabī*) is very common in Safaitic inscriptions (Ababneh 2005: 70–71; al-Khreyshah 2004: 195–206), *ẓbyt* ‘female gazelle’ (WH 2342, pl. *ẓbyt* = Ar. *ẓabyāt*, WH 3373). See for instance the following Safaitic example *l-drh bn ʿṯmt hẓbyn* ‘these gazelles belong to Dirrah son of ʿAṯmat’ (CSNS 550). This inscription is roughly encircled by a line, while depictions of four gazelles and two dogs accompany the text. Furthermore, the term *ryym* ‘Addax, white gazelle’ is also attested in a Safaitic inscription (WH 413). Arabic sources also mention that *ẓabī* were best hunted with *al-fahd* ‘leopard’ (Kušāğim 1954: 201).

Arabian oryx

The Arabian oryx (*Oryx leucoryx*) and hartebeest (*Alcelaphus buselaphus*; Ar. *al-mahā al-ʿarabī, baqar waḥšī, wuḍīḥī*, etc.) are well known in the Arabic sources (Hommel 1879: 228; Kušāğim 1954: 160–162; Lewicki 1986: 1227–1230; aṣ-Ṣāliḥī 1981: 89–100). An ungulate, the Arabian oryx is one of the well-attested hunted animals in Arabia. Two different types of oryx are known from ancient Yemen (Figs. 7, 8, 10). The first one is the Arabian oryx, known as *bqr* (ʿAbadān 1/39) and in Hadramitic (Ja 949/2) (Sima 2000: 49–52) as well as *bqr ḥs²n* in Sabaic (MB 2006 I-16). The other type is mentioned in inscriptions as *ḥwry* (ʿAbadān 1/39; *ḥwrw*, Ja 949/2). It would appear that *ḥwry* is to be identified with the addax antelope (*Addax nasomaculatus*), also known as the white antelope and identified in modern Arabic as *mahā abū ʿadas* (cf. Arabic *riʾm* ‘white antelope, addax’; Fig. 19). In ancient South Arabia, the Arabian oryx was the symbol



Fig. 10.
An Arabian oryx (courtesy Walters Art Museum, Baltimore).

of the supreme god ʿAthtar (Ryckmans J. 1996: 136). When hunted, the Arabian oryx was often driven into desert kites.

The Arabian oryx is also frequently attested in Safaitic drawings and inscriptions (Ababneh 2005: 71–72, WH 762; al-Khreyshah 2004: 195–206). The terms used are *dṣy* 'Arabian oryx' and *ṯr* 'bull,' the latter also used to describe the animal in Hismaic. In the Hismaic carvings, the oryx is the next most commonly depicted hunted animal after the ibex (Corbett 2010: 154–155). Below are some examples:

L-ḥdd hdṣy 'this Arabian oryx belongs to Ḥaddād' (Ababneh 2005: no. 1103).[11]

L-gnʾl bn zlt hdṣy 'this Arabian oryx belongs to Zallat' (CIS V, 3022).

L-gn bn mzn hdṣy 'this Arabian oryx belongs to Gann son of Māzin' (WH 762, see also WH 3502, 3503).

Ostrich

The Arabian ostrich (*Struthio camelus syriacus*), now extinct across the Arabian Peninsula, is well documented in archaeological sources (Potts 2001: 182–190) and the Arabic classical sources (Viré 1993: 828–831). Although ostriches are not attested by name in ancient South Arabian inscriptions, they occur frequently in reliefs, especially in the Yemeni Jawf, for instance from the temple of Banāt ʿĀd, possibly dated to the seventh–eighth century BCE (Figs. 7 & 8; Arbach & Schiettecatte 2006: 18–20, pl. 69; see also Sima 2000: 175–179; Antonini de Maigret 2012: 27–31). The ostrich is also well attested in the rock art of Oman (ElMahi 2001: 15–26).

Ostrich hunting is well documented in North and Central Arabia, especially in the Safaitic drawings and inscriptions (Ababneh 2005: 75–76; Ḥarāḥšeh 2010: 121; WH 802, 2786, dual *nʿmtn* 767, 768, 1222, 3458, 3805a). In Safaitic, the ostrich is described in both the singular (*nʿmt*) and the plural (*nʿm*) (see Ar. *naʿāma*, pl. *naʿām* [CSNS 368–370]; *raʾl, raʾla* = *wald al-naʿām* 'the young one of the ostrich').

Below are some examples from Safaitic inscriptions:

L-rbn bn dḫl hnʿmt 'this ostrich belongs to Rabbān son of Daḫīl' (Wadi Ruʿeila, Ababneh 2005: no. 877).

L-xx[ġ]ḍr bnt ʾḥwr hnʿm 'these ostriches belong to Ġāḍir daughter of Aḥwar', Wadi Ruʿeila, Ababneh 2005: no. 738).

L-ḥs^{2}m hnʿm 'these ostriches belong to Ḥusām' . . . Wadi Ruʿeila (Ababneh 2005: no. 976).

L-wʾl bn dbn hnʿm 'these ostriches belong to Waʾl, son of Dabbān' (CSNS 369). A drawing of five ostriches is carved on the stone also (CSNS 368–370).

(. . .) *w-ʿwn f-ḍʿf hḫl bʿd h-nʿm*, 'and he helped and the horses were weak after the ostriches'. This text seems to refer to the weakness of the horses after following the ostriches (WH l677b).

(. . .) *w-ʾs^{2}rq b-ḫyl bʿd hnʿm* . . . '. . . and he went eastwards riding the horses following the ostriches. . .' (WH l700a).

There is also good evidence of ostrich hunting from Central Arabia, often in the form of rock drawings accompanied

[11] See other evidence in Ḥarāḥšeh 2010: nos. 94, 360; WH 762, 3502.

by inscriptions. The Arabian ostrich also occurs in Hismaic drawings from southern Jordan (Corbett 2010: 155).

Many hunting scenes tend to show horsemen driving or shooting ostriches. Evidently, desert kites were an important method for hunting ostriches, as shown by a rock drawing and inscription recovered from Jordan's eastern desert (Betts & Helms 1986: 67–72; Macdonald 2005: 332–345). This inscription states: *l-ʿmr hnʿmt* 'these ostriches belong to ʿĀmir' (Betts & Helms 1986: pl. 1, no. 3; Fig. 20/e). The inscriptions CSNS 518–526 are also accompanied by drawings of five gazelles and an ostrich.

Ostrich hunting is well documented in pre-Islamic Arabic poetry (Kušāğim 1954: 217–224; aṣ-Ṣāliḥī 1981: 126–131). Unfortunately we have no accurate information about other birds that may have been hunted in ancient Arabia, such as the *ḥubārā* 'Arabian bustard' (*Ardeotis arabs*), which was one of the favourite birds hunted in the early Islamic period, found widely across the Middle East and North Africa and still hunted today (Viré 1997: 98). In one Safaitic inscription partridges are mentioned. The text reads: *l-s²dd bn wkyt w-s²wʾ ḥgln* 'by Šaddād son Wākiyat and he grilled the partridges' (WH 1949). Snares are described as traps made from a loop of leather, wire or string. These were common for hunting birds in the ancient Near East, continued in the Islamic period and are still used today (Keel 1997: 89).

Onager/wild ass

In Arabic *ḥimār al-waḥš* or *al-ḥmār al-waḥšī*, onager (*Equus hemionus*), is the most commonly used term in the Arabic sources for this hunted animal (Hommel 1879: 126–139; aṣ-Ṣāliḥī 1981: 83–89), which is also well documented in pre-Islamic poetry (Bauer 1992: 11–24).[12] The terms *ʿayr, faraʾ* and *ʿard* for onager are also attested (1992: 126–139). One of the most common names for the onager is *faraʾ* (pl. *farāʾ*) (Hommel 1879: 132), found in South Arabic as *frʾ* (pl. *ʾfrʾ*, ʿAbadān 1/39; Sima 2000: 59–62). In Safaitic inscriptions, the onager is known as *frʾ* (SIJ, 784), *ʿr* (Arabic *ʿēr*), *ḥmr* (WH 2310–2312) and *s¹ḥly* (Ar. *saḥlī* and *misḥāl*; see al-Aṣmaʿī 1888: 7).

In ancient South Arabia, both *frʾ* (ʿAbadān 1/39, see above) and *ḥmr* are attested as game animals. For example, one passage from a South Arabian inscription reads: *s¹ṭrw / zn / gzln / kʾtyw / bn / ʾs¹ʿyn / k-s³llw / s²ʿbn / [m] ⁸lkn / w-ṣydw / ʿly / ms¹bʾ-hmw / s¹bʿt / w-ʿs²ry / w- ⁹ʾḥdy / mʾtm / ḥmrm* 'they wrote this rock-inscription, when they came back from Asʿayān after plundering the tribe of Mālikān and they hunted in their expedition one hundred and twenty-seven onagers' (BR Yanbuq 47/7–9, 625 Ḥimyaritic = 510 CE).

Although it is difficult to confirm whether *ʿr* is a domestic donkey or a wild ass (LP 457,514, SIJ 436, WH: 641; Ababneh 2005: no. 11), we have clear evidence that *ʿr* occurs also as meaning game. A Safaitic inscription reads: *l-ʾs¹ bn yṣḥḥ w-ṣyd ʿr mn ngd* 'by ʾŌs, son of Yaṣḥaḥ, and he hunted onagers from Nağd' (CSNS 381). It is possible that the author of this text went to Nağd in order to hunt wild onagers or it might refer to the many plateaus in the Harrah.

Deer

The Arabic term *ʾayyil*, Syrian roe deer (*Capreolus capreolus*) (Sabaic, Safaitic, Hismaic *ʾyl*), possibly indicates the general name for deer. It is attested twice in ancient South Arabian inscriptions (Sima 2000: 26–28), once in Sabaic as a small offering statuette (Beeston *et al.* 1982: 10) and also in Minaic as a sacrifice (MAFRAY Darb-aṣ-Ṣabī 1/13).

An inscription in Safaitic reads: *l-s²kr bn ms²kr h[ʾ]yl* 'it belongs to Šākir son of Maškūr this deer/stag', Wadi Derham (Ababneh 2005: 75–76; see also 1057; see also the personal name *ʾyl* in LP 260, 576; ISB 336; CIS 48).[13] The term *ʾyl* is also used in Hismaic to describe a type of hunted animal (Corbett 2010: 359).

It is also well documented in the classical Arabic sources, including the red deer (Ar. *yaḥmūr*), which is described as *ẓabī aḥmar* in the desert (Kušāğim 1954: 143, 202).

Spiny-tailed lizard

The spiny-tailed lizard (Ar. *ḍabb*) is well adapted to desert environments, the typical habitat of *Uromastix a. microlepis*.[14] The rock art of Arabia gives some information about *ḍabb* hunting in ancient times. Rock drawings representing reptiles from Wādi Damm, north-west of Tabūk in Saudi Arabia, may be *ḍabb* (Khan 1993: 16). The rock drawings from Wadi Damm (Figs. 11 & 12) possibly date to *c.*2500–1500 BCE (1993: 122, pls. 50–53, 70, 130). In addition, there is good documentation in the classical Arabic sources about hunting *ḍabb* (Kušāğim 1954: 242–246;

[12] On the different names and description of onager in the Arabic sources and in particular the poetry, see Bauer 1992: 24–38.

[13] The hunting of *ʾayyil* was well known in the early Islamic period (Kušāğim 1954: 143–145).

[14] Cf. Lane: 1761–1762. Hunting spiny-tailed lizard is still practised in other parts of the Arabian Peninsula such as Saudi Arabia (Monchot, Bailon & Schiettecatte 2014: 96–102) and Oman. On ethnographic material, see ElMahi 2002: 31–46.



Fig. 11.
A lion hunt, from Umayma, Dhamār area, Yemen (courtesy K. Noman).

aṣ-Ṣāliḥī 1981: 113–115). It is also mentioned in one Safaitic inscription that reads: *hs*^{1}*rb w-hbd ḍb* ‘the camel group (belongs to NN) and he cooked spiny-tailed lizard’ (CIS 5179).

Pig

Pig is not mentioned in the ancient South Arabian inscriptions and no representations in rock art or reliefs have been discovered, but the wild boar seems to have existed in Bādiyat al-Shām (Ǧabbūr 1988: 96).



Fig. 12.
A drawing of a lion hunt; hunting scene from Umayma, Dhamār area, Yemen (drawing M. Maraqten).

Hare

There is no information from South Arabia about hare hunting, but it is well documented in pre-Islamic poetry (aṣ-Ṣāliḥī 1981: 110–113), and there is also an example of hare hunting found in a South Arabian relief panel (see Fig. 1). Hares and jackrabbits are leporids, belonging to the genus Lepus. In a Safaitic drawing, there is an example of a horseman using his spear to hunt hare (al-Khreyshah 2007: 19).

Overview of hunting practices in ancient Yemen

Siglum	Organiser	Assistants	Dogs	Horse	Game	Numbers
Y.85.AQ/20 Eryani 53	Karibʾīl Watar	assistant			hunting game	1000
Y.85.AQ/24 Eryani 55	Yaṯaʿʾmar Bayn	assistants			hunting game	460
ʿAbadān 1	Tribal leader	800 soldiers	500		Arabian oryx, addax antelope, onager, ibexes, wild animals	
Ry 544	Ḏamarʿlī Ḏarīḥ, king of Sabaʾ and Ḏū-Raydān				ibexes and gazelles	2100
Bāsalama-Šibam al-Ġiras 22					ibexes	100
BR-Yanbuq 47					onager (*ḥmr*)	137
Ingrams 1	Yadaʿʾīl, King of Ḥaḍramawt	200 soldiers, 100 hunters	200		leopard (*ʾnmr*)	4
					cheetah (sing. *fhd*)	2
					ibex	600
Naqīl Kuḥl 1	Šāriḥum Ayman of the Clan Hamdān				ibex	3000
					ibex	300
					ibex	700
Ja 949	Yadaʿʾīl, King of Ḥaḍramawt				Arabian oryx	35
					addax	82
					gazelle	25
					cheetah (*ʾfhd*)	8
MS Šiğāʿ 1	Abū Karib Asʿad	250 of the clan Nawdum, 270 of the tribe Šaddād, etc.			ibex	2700

IV. Purposes of hunting and social context: food, ritual hunt, hunting for sport and royal hunt

The exploitation of wild game remained a central activity in some regions of the Arabian Peninsula through the ages. Hunting was practised by both individuals and groups. The inhabitants of the interior desert of Arabia probably practised hunting and gathering throughout the Neolithic. Animals hunted include ibex, gazelle and wild equids (Lewis 2005a: 29–30, 47–49; 2005b: 133). Meanwhile, it seems to have been the case that hunting continued to be an important element in some regions of Arabia in historical times.

Hunting for sport and royal hunt

The hunting of wild animals for sport, food or for the protection of people and herds was common in the ancient Near East. Royal hunts and the capture and display of dangerous and exotic beasts have been regular elements of the elite's lifestyle and especially royal life in the ancient Near East since the third millennium BC. The royal hunt served to display the skills of the leader and, in a more symbolic fashion, to express his capacity to dominate the wild powers of the countryside, proving his heroism in war and in the chase (Heimpel 1976–1980: 235–236). The hunt was a demonstration of the ruler's courage. As in Mesopotamia or Egypt, rulers in ancient Yemen were shown mastering and hunting many beasts, including lions.

Royal hunting in the Kingdom of Sabaʾ

Hunting for sport seems to have been practised in ancient Yemen (Figs. 11 & 12; possibly dating to the first–third century CE) and was often carried out by rulers, tribal leaders and elites. A royal hunt was an elaborate social event. In ancient South Arabia, drive-hunts took place in which the king and his *qayls* (tribal leaders) captured great numbers of game.

Early Arabic sources, including poems of eulogy, self-glorification (*faḫr*) and the like, often describe how hunted animals escape and the hunter fails to catch them. Other classical Arabic sources contain legendary studies about pre-Islamic Arabian kings who participated in the hunt (az-Zabīdī T. 1985: 88–91; Ibn Manglī 1984: 48–60; Stetkevych 1996: 102–118).

Lion hunting (sing. *lbʾ*) is mentioned several times in Sabaic inscriptions (Figs. 11 & 12) and was a particularly prominent sport among the Sabaean kings such as ʿAlhān Nahfān (CIH 312) and tribal leaders in Sabaʾ (Ir 21; Ry 538).

This custom was already practised in the early Sabaean period by the Sabaean ruler, the *mukarrib*, and continued into the Himyarite period. Recent epigraphic evidence also adds to our sources about the royal hunt in ancient Yemen. Several texts mention that the Sabaean *mukarribs* practised the royal hunt in Shiʿb ʿAql to the west of Marib, possibly dated to the eighth–sixth century BCE (Beeston 1991: 49–57). Among these *mukarribs* was Karibʾīl Watar son of Ḏamarʿalī (*c.*685 BCE) and Yaṯaʿʾamar. In some cases the royal hunt functioned also as a religious ritual. Apparently there was a 'commander of the Royal Hunt' in Sabaʾ (*ṣyd mlkn*). This title is mentioned in a recently discovered inscription at the Awām temple. A commander of the royal hunt made a dedication to the god

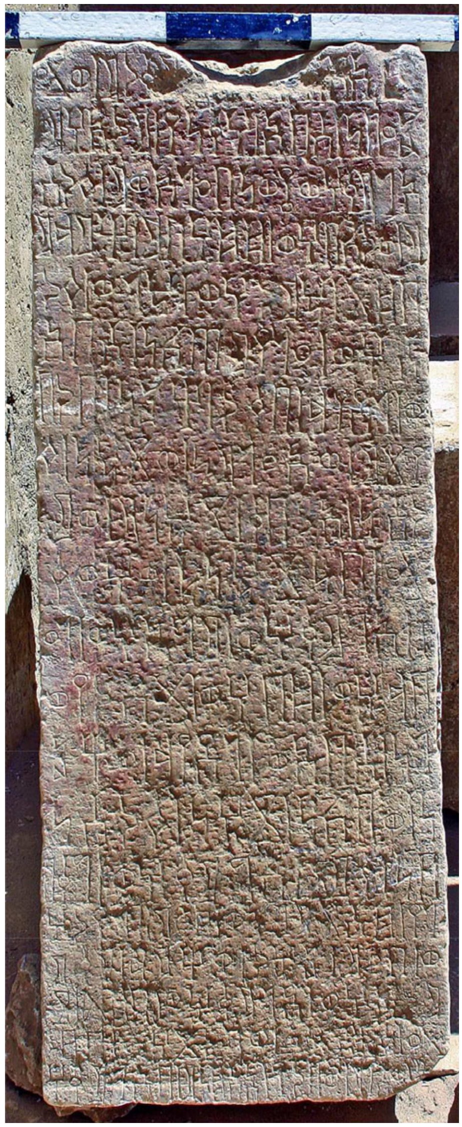


Fig. 13.
A hunting inscription of the Governor of Sabaʾ in Maʾrib (MB 2006 I-16, AFSM photo archive).

Almaqah for the protection of his wife from an epidemic (MB 2005 I-34; unpublished).

Hunting the Arabian oryx and other wild beasts by the Governor of Sabaʾ in Maʾrib

We have a record on hunting in the area of the Sabaean capital of Maʾrib from the fourth century CE, when Sabaʾ was annexed by the kingdom of Himyar. This recently discovered twenty-line Sabaic inscription (MB 2006 I-16; Figs. 13 & 14), found in 2006 at the Awām temple (Maḥram Bilqīs) near Maʾrib during the AFSM excavations, mentions the hunting trips carried out by the governor of Sabaʾ. It mentions the hunting of Arabian oryx and other wild beasts (*wḥs*^{2}). The governor made a thanksgiving offering to the Sabaean national god Almaqah because his horse had been healed and saved after being injured in the hunt. The hunting areas mentioned in the text are Rabyatum and Aʿlumān, both possibly north-west of Maʾrib. The inscription can be dated to the middle of the fourth century CE. Here is the *editio princeps* of this text:

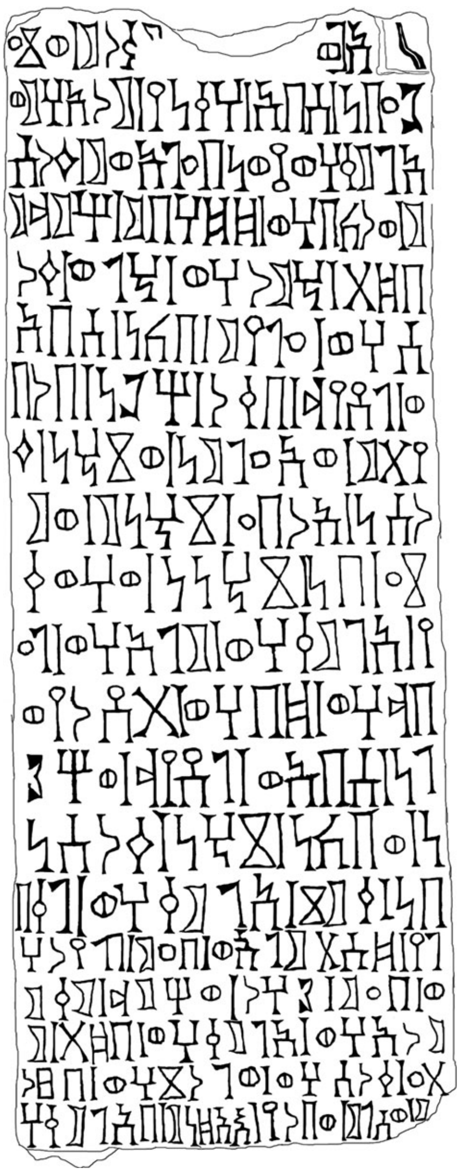


Fig. 14.
A hunting inscription of the Governor of Sabaʾ in Maʾrib (MB 2006 I-16, drawing M. Maraqten).

Transcription

1. *ʾs^2[ws^1 / bn /] mqrm / wzʿ*
2. *šʿbn / s^{1}bʾ / hqny / mrʾhmw*
3. *ʾlmqhwṯ<h>wnbʿlʾwm / frs^1*
4. *m / wrkbhw / ḏḏhbm / ḥmdm*
5. *bḏt / ḫmrhw / ḫlw / fr*
6. *s^{1}hw / ʿlym / bkn / s^{1}bʾ*
7. *w / lṣyd / bqr / ḥs^{2}n / brb*
8. *ytm / wʾʿlmn / wzḫn / f*
9. *rs^{1}n / ʾrbʿ / zḫnm / wm*
10. *zʿ / bn / zḫnn / whwf*
11. *y / ʾlmqhw / mlʾhw / lʿ*
12. *bdhw / ḏbhw / tṣryw*
13. *ln / s^{1}bʾw / lṣyd / wḥs^2*
14. *n / wbkn / zḫn / frs^{1}n*
15. *bn / qmz / ʾlmqhw / lqb*
16. *ly / ḏs^{1}tmlʾw / bʿm / ġyrh*
17. *w / bʿm / s^{2}hr / wḥmd / mqm*
18. *mrʾhw / ʾlmqhw / bḏt / m*
19. *tʿ / frs^{1}hw / wgrzhw / bḍr*
20. *m/ ws^{1}lm/ wbry / ʾʾḏnm / bʾlmqh*

Translation

1. Ašw[as of the] clan Maqārum, the governor of
2. the tribe Sabaʾ, dedicated to his Lord
3. Almaqah Ṯahwān Lord of (the temple) Awām, a horse statuette
4. and its horseman made of bronze in gratitude
5. because He [i.e. Almaqah] granted him the healing of
6. his horse that called ʿĀliyum, when they carried out a journey
7. to hunt the Arabian oryx in (the region of)
8. Rabyatum and Aʿlumān. And the horse
9. was injured and had four injuries and
10. was fallen down because of this injury.
11. And Almaqah fulfilled for His
12. servant his request in which they requested from Him
13. when they took a journey to hunt wild animals.
14. And because the horse was injured due
15. to a punishment from Almaqahū because they
16. looked for a protection from another deity,
17. namely from (the god) Šahr. And he (sc. Ašwas) praised the might
18. of his Lord Almaqahū in gratitude because He
19. [i.e. Almaqah] delivered his horse and protected it from weakness during war and
20. peace times, and for the protection of faculties (of the dedicator). By the authority of Almaqah.

Commentary:

The term *wzʿ* is well attested in Sabaean inscriptions meaning 'title of tribal and military commander' (Beeston *et al.* 1982: 167).

wḥs²: this term means 'wild animal' and is not previously attested in the ancient South Arabian inscriptions, see Arabic *waḥš* in the same meaning. The name of the horse is *ʿlym*, ʿĀliyum. This is documented as the name of a man in Ja 689/4, Ja 745/1.

The verb *zẖn* means 'be wounded'.

The verb *mzʿ* in Arabic means 'to run, bound, tear along, gallop along, to tear apart' (Wehr & Cowan 1976: 906). Arabic *mazaʿa* is given in Lisān (article *mzʿ*) as *asraʿa* 'fast, be quick, hurry, run, rush'. It is reported here for the first time in the ancient South Arabian inscriptions.

qmz 'punishment': this verb occurs for the first time in the inscriptions.

grz: cf. Arabic *ğarazat an-nāqah: hazalat* 'the she-camel has suffered from emaciation' (Lisān: article *ğrz*). No accurate data about the god *s²hr*, Šahr is available, but it is attested in a Minaic penitential inscription (Y.03.B.A.1).

Royal hunt in the Kingdom of Qataban

We also have evidence about ritual hunting that was practised in Qataban by the king Yadaʿʾab Ḏubyān and dedicated to the sun goddess (CIAS 47.91/r 3 = CSAI I, 1076, see below).

Royal hunting expeditions in Ḥaḍramawt

The kings of Ḥaḍramawt regularly participated in royal hunts in the area of al-ʿUqla, west of Shabwa, the capital of Ḥaḍramawt, where several rock inscriptions have been engraved. Yadaʿʾīl Bayn king of Ḥaḍramawt was one of these kings (Ja 949, third century CE; Beeston 1982: 8–10; Sima 2000/2001: 97) (Fig. 15). One text is presented below.

Transcription

1. *ydʿʾl / byn / mlk / ḥḍrmt / bn / rbs²ms¹ / bn / ʾḥrr / yhbʾr / ḏs¹qlb / wḫrr / hgrhn / s²bwt*
2. *wbrʾ / bytn / s²qr / ṣll / bgndln / mt / ṯbrw / bn / ṣydmn / whrgw / ḫms¹ / ws²lṯy / bqrm*
3. *wṯty / wṯmnhy / ḥwrw / wḫms¹t / wʿs²ry / ṣbym / wṯmnwt / ʾfhd / bgndln / ʾnwdm*

Translation

1. Yadaʿʾīl Bayn, king of Ḥaḍramawt, son of Rabšams, son of the noblemen Yuhabʾir, who had renewed and fortified the city of Shabwa
2. and constructed the palace Šaqir; he had performed the hunting rite at the fortress (sc. Anwadum, i.e. al-ʿUqla), when they returned back from the hunting expedition and they killed 35 Arabian Oryx,
3. 82 Addax antelopes, 25 gazelles, and 80 leopards, at the fortress of ʾAnwadum.

Another royal hunting expedition was carried out by the Haḍramitic king *ydʿʾl byn mlk ḥḍrmt bn rbs²ms¹* 'Yadaʿʾīl Bayn king of Ḥaḍramawt son of Rabšams (Ingrams 1).

Royal hunt in the Kingdom of Himyar

We have good evidence of royal hunting in the kingdom of Himyar. Recently an eighteen-line inscription MS-Šiğāʿ1) was discovered in Naqīl aš-Šiğāʿ north of Ṣanʿāʾ and dated to the year 539 himyaritic = 429 CE (al-Salami 2011: 12–20). The inscription records a hunting expedition of the Himyaritic king Abū Karib Asʿad (*c.*400–440 CE). Unfortunately the text is partly damaged. It mentions not only the number of hunted animals taken during the expedition, but also gives the numbers of animals killed in previous hunting campaigns, probably in the same area.

Ritual hunt

The ritual hunt in ancient Yemen has been much studied and discussed by several scholars (Beeston 1948: 183–196; Ryckmans J. 1976a: 259–308; Serjeant 1976; Müller 1986: 101–107; 1989: 89–96; Sima 2000/2001: 85–90).[15] Although there were other purposes for hunting (royal hunt, for sport), the ritual hunt seems to have been a very important institution in ancient Yemen. It should be stressed that the ritual may be religious or social, or a combination of both. Several inscriptions give us solid data about the religious motivation of hunting practices in ancient Yemen, primarily from the Old Sabaic period (*c.* eighth–third century BCE). Data from the Middle and Late Sabaic period are also available (second century BCE–sixth century CE). The religious motivation seems to have been to guarantee continued fertility.

In general, the most significant data about ritual hunting comes from Sabaic inscriptions. The ritual hunt was prac-

[15] A. Sima (2000/2001: 84–90) tends to diminish the evidence of the ritual hunt in ancient Yemen as proposed by these scholars.



Fig. 15.
A Ḥaḍramitic inscription from al-ʿUqla (Ja 949; photograph M. Maraqten).

tised by the Sabaean rulers primarily in relation to the South Arabian supreme deity ʿAthtar, although it was also performed for other deities, including ʿAthtar, Ḥalfān, Taʾlab and Raḥmanān, as well as the goddesses Kirwam and Šams.

Important information about the religious aspects of ritual hunting is found in *c.* eighteen Old Sabaean inscriptions discovered by the Italian mission in Yalā (*c.* eighth–sixth century BCE), west of Maʾrib (Beeston 1991: 53). These texts documented the ritual hunts of the *mukarribs* Karibʾīl Watar son of Ḏamarʿalī (AQ/8 = Eryani 49, *c.*685 BCE) and Yaṯaʿʾamar Bayn son of Sumhuʿalī (AQ/7 = Eryani 41 and AQ/16 = Eryani 42, Y.85.Y/1 = Eryani 47).

It appears the *mukarribs* of Sabaʾ practised ritual hunting primarily for the god ʿAthtar and possibly his spouse Kirwam. ʿAthtar was the supreme South Arabian deity and provider of rain, while Kirwam was probably the goddess of hunting. In the early Sabaean inscriptions, ritual hunting activities were expressed in a standard formula: *ywm / ṣd / ṣyd / ʿṯtr / w-krwm* 'when he hunted the game-hunting of ʿAthtar and Kirwam' (Ry 544/3; RES 4177/4; Y.85.AQ/7 = Eryani 41). The formula *w-ywm / ṣd / ṣyd / krwm* 'when he hunted the game-hunting of Kirwam' (RES 3946/7, Y.85.Y/1 = Eryani 47) is also attested.

We also have good evidence for ritual hunting dedicated to the sun-goddess. A phrase in a Middle Sabaic inscription reads: $^{1.}$[*ḥg-n / wq*]*ht / s^{2}ms^{1}m / bʿlt / m* ^{2} [*yfʿ ʿbd*]*-h / s^{2}rḥʾl / bn / btʿ* $^{3.}$[. . . . . .] *kl yṣdn / l-h* 'thus commanded Šamsum the lady of Mayfaʿ for her servant Šaraḥʾīl of the clan Bataʿ that he should hunt for her' (CIH 571/1–3). A further sacrifice of ibex to the sun-goddess is attested in a Sabaic inscription from Šibām al-Ġirās north-east of Ṣanʿāʾ (Bāsalama-Šibam al-Ġirās 22).

Further evidence for ritual hunting is attested in cult rituals associated with the god Ḥalfān (Haram 10 = CIH 547). The inscription mentions that two groups made a penitential offering to the god Ḥalfān after he punished them because they postponed the performance of his hunting games. In this text, the term *mṭrd* 'game' is used instead of the term *ṣyd* in the same meaning. The passage reads:

^{1}[*ʾh*]*l* <|> *ʾmrm / w-ʾhl / ʿṯtr* ^{2}[*tn*]*ḫyw / w-tnḏr / l-ḥlfn* ^{3}[*b*]*hn / ʾl / hwfyhw / mṭrd* ^{4}*hw / b-ḏ-mwṣbm* (. . .) *w-* ^{7}*ns^{1}ʾw/ mṭrdn / ʿd / ḏ-ʿṯ* ^{8}*tr*

'the clan Amīrum and the religious caste of the (god) ʿAthtar confessed and did penance to (the god) Ḥalfān because they did not duly perform for Him his hunting game in the (month) Ḏū-Mawṣabum (. . .) and because they postponed that to the month Ḏū-ʿAthtar' (Haram 10 = CIH 547, *c.* first century CE).

Important information is also available about hunting for the god Taʾlab, the god of the local kingdom of Sumʿay north of Ṣanʿāʾ. The passage reads: *w-ʾl / s^{3}n / s^{1}mʿy / h* ^{7}*ḫbn / ṣd / tʾlb* 'and it is not allowed that (somebody) from Sumʿay miss the hunting season of (the god) Taʾlab' (RES 4176/6–7: Hagar Zahra, Riyām, third century BCE).

There is also evidence that cultic stones were erected in fields as part of the Sabaic ritual hunting practice: *qf / qyf / ʿṯtr / w-krwm* 'he erected the cultic stela of ʿAthtar and Kirwam' (Schm/Marib 23; Y.85.Y/1 = Eryani 47, see also the similar text RES 4177). It would appear that these stelae functioned as boundary stones to separate the sacred hunting space of the deity from the surrounding areas. In fact, these areas were declared as sacred spaces for the ritual hunt of these deities. A sacred area, where wild animals were protected to be hunted, was set up for the Sabaean god Taʾlab (RES 4176/6).

The ritual hunt was also practised for the sun-goddess Šams in Sabaʾ (CIH 571). In the sun hymn of Wadi Qāniya, a phrase states: *b-ṣyd / ḫnwn / mʾt / ns^{1}ḫ-k* 'in the hunting season of the Ḫinwān, you [i.e. the sun-goddess] have slain 100 (animals)' (Qāniya, verse 2) (ʿAbdallāh 1988: 92).

Of interest is a recently published fragmentary Late Sabaic hunting inscription that mentions ritual hunting in relation to the monotheistic god Raḥmanān in ancient Yemen (MS Šiğāʿ 1; see Al-Salami 2011: 11–20). According to this inscription, which mentions the hunting activities of the Himyarite king Abū Karib Asʿad in Khawlan, there is data about the possibility of the dedication of a portion of prey to the god Raḥmanān, the lord of heaven (MS Šiğāʿ 1). The beginning of the phrase is unfortunately

damaged, but it clearly mentions a dedication to Raḥmanān: ^{15}*]m{r}ʾs^{1}myn / s^{1}bʿ / mʾtm / w-ṯny / ʾlfn / w-qdmy / ḏn /{ ḫ}[rfn* ^{16}*w-]ʾqḏw s^{1}ṯt / ws^{1}bʿy* ‘[and they have killed for] the Lord of Heaven two thousand and seven hundred (ibexes) [. . .]. And in the previous year they captured seventy-six [. . .]’ (MS Šiğāʿ 1/15–16).

Furthermore, a Qatabanian king performed a ritual hunt dedicated to the sun-goddess. The text reads: ^{1}*ydʿʾb / ḏbyn / bn / s^{2}hr / mkrb / qtbn* ^{2}*ṣyd / l-s^{2}ms^{1}* ‘Yadaʿʾab Ḏubyān, king of Qataban, hunted for the sun-goddess Šams’ (CIAS 47.91/r 3 = CSAI I, 1076).

In Ḥaḍramawt hunting rituals associated with the ibex have been preserved from the pre-Islamic period until today. After a successful hunt, the hunters sing songs, read verses and reenact episodes from the hunt. The Hadrami hunt is not only a social ritual but it also seems to have a religious purpose, given that a successful hunt is thought to ensure rain (Serjeant 1976: 36) and success in hunting ibex ensures prosperity for a whole year.[16]

Such practices suggest that the ‘hunt of ʿAthtar’ and some other types of ritual hunting were, in principle, *istisqāʾ* prayers for rain and fertility. In this regard, the Sabaean *rs^{2}w* ‘priest’ seems to have had a role associated with *istisqāʾ*. There is little evidence among North Arabian inscriptions for the ritual hunt, but several Safaitic inscriptions mention the invocation of deities to get rain, a fact that these texts might be considered as an *istsqāʾ* ‘prayer for rain’.[17]

In rock art discovered in Syria, however, depictions of figures holding sceptres or clubs and linked with lions and bulls may have religious connotations, perhaps associated with Mesopotamian divinities (Lemaitre & Van Berg 2008: 5–12).

In pre-Islamic Arabia, hunters were known to have performed a firstlings or first fruits sacrifice to the gods. Classical Arabic sources inform us that pre-Islamic Arabs used to dedicate the first fruit or firstlings (Ar. *farʿ*, South Ar. *frʿ*). Among these sacrifices was the firstling of the hunt that was sacrificed to their deities. For instance, an Arabic proverb states: *ʾawwal aṣ-ṣayd faraʿ*, ‘first of what are taken by the chase or the like is a *faraʿ*’ as being likened to a firstling (Lane: 2380). The firstling (*farʿ*) taken in a hunt was considered a good omen and therefore sacrificed to the deity.[18]

V. Hunting techniques and practices

The hunter and his implements

Good data exist on hunting techniques in the ancient Near East (Heimpel 1976–1980: 234–236; Keel 1997: 89–95). The general Arabic term for hunter is *ṣayyād* (Lane: 1752–1753; az-Zabīdī T. 1985: 45–11). This term is applied to both hunters and fishermen in all Semitic languages and was widely used by the people of the ancient Near East (e.g. del Olmo Lete & Sanmartín 2003: 778). It derives from the common Semitic root ṢYD ‘to hunt’ and suggests both the pursuit and capture of wild animals. The Arabic root QNṢ is an exact equivalent of ṢYD. Few South Arabian inscriptions mention the term *ṣyd* ‘hunter’ (Beeston *et al.* 1982: 146).[19] As noted above, however, many South Arabian rock drawings with hunting scenes are associated with personal names that may, in fact, be the names of the hunters represented in the scenes (see Figs. 2 & 3).

The most widely attested verbs in Arabic with the meaning ‘to hunt’ are *ṣāda* and *ṭarada* (= South Ar. *ṣyd* and *ṭrd*) (Lane: 1752–1753; 1838–1840; aṣ-Ṣāliḥi 1981: 20–24). The Arabic verb *ṭarada* means ‘he coursed, pursued, hunted, or strove to gain possession of or to catch, wild animals or the like’ (Lane: 1838); compare *ḫarağa yaṭrudu ḥumur al-waḥš* ‘he went forth to course, pursue, hunt, snare, entrap, or catch, the wild asses’ (Lane: 1838) and *ṭaradat al-kilāb aṣ-ṣayd* ‘the dogs drove away, and pursued closely, the wild animals, or the like’ (Lane: 1838). Arabic *ṭarīda* means ‘wild animal, or the like, that is coursed, hunted, snared, entrapped, or caught’ (Lane: 1839).

Equally good are the descriptions of hunting dress in Arabic sources (aṣ-Ṣāliḥi 1981: 77–79). In addition, some of the Arabian rock drawings depict specific forms of dress that were worn by hunters (Fig. 16).

Plenty of detailed evidence is also known for hunting equipment used by hunters in pre-Islamic Arabia. In hunting scenes, the hunter is most often shown using a bow, but spears, throwing sticks/boomerangs and clubs were

16 Several studies have been undertaken on the rituals of the traditional ibex hunt in Ḥaḍramawt, the most detailed of which is Serjeant 1976; see also Rodionov 2007: 110–113; Bin ʿAqīl 2004.

17 On water in Safaitic inscriptions, see ʿAbbādī 2012: 102–123.

18 Although the term *frʿ* meaning ‘firstling, first fruit’ is well attested in South Arabic, it is not attested in relation to hunting (Beeston *et al.* 1982: 45).

19 The term *ṣyd* in Sabaic also means ‘category of troops’ (Beeston *et al.* 1982: 146).

employed. Arabic sources provide detailed descriptions of hunting tools in the early Islamic period, which in most cases were not that different from those used in the pre-Islamic period (Kušāǧim 1954: 163–170; Ibn Sallām 1985: 22–28; aṣ-Ṣāliḥi 1981: 178–188). Boomerangs and sticks were also carried by hunters (Khan 1993: 172) but other types of weapons are occasionally found in Arabian rock art (Antonini de Maigret 2012: 18–19). The pre-Islamic poets, however, often provide descriptions of hunting weapons (Schwarzlose 1886: 38–71; Ibn Sallām 1985: 19–22).

One of our primary sources of information about ancient hunting weapons comes from North Arabian rock art (Khan 1993: 172) and ancient South Arabian reliefs. By contrast, the epigraphic evidence of both North and South Arabia rarely gives the names of the weapons used in the hunt. Rock drawings and reliefs in South Arabia show hunters, both individually and in groups, carrying weapons. The bow and arrow (along with arrowheads) was the most commonly used weapon, both by hunters and soldiers on military expeditions (e.g. YM 1131, A-20-70, A-20-550). The hunter on foot typically carried a bow and arrow (Figs. 2, 3, 17), while horsemen and camel riders carried lances and throwing pikes.



Fig. 16.
A hunter in action, Radāʿ, Yemen (drawing M. Maraqten).

Hunters and warriors are often shown wearing daggers (e.g. YM 69). These served as the personal weapon of the everyday hunter (Antonini de Maigret 2012: 18–19). The Yemeni term *jambiya* describes a dagger with a slightly curved blade that is worn on the belt.[20]

Spears and lances were equally important hunting weapons (spear = Ar. *ḥarba*, Sabaic *ḥrb*; lance = Ar. *rumḥ*, Sabaic *rmḥ*) (Beeston *et al.* 1982: 117; Ibn Sallām 1985: 22–28). Both items were widely used by hunters in pre-Islamic Arabia (aṣ-Ṣāliḥi 1981: 178–188). As evidenced by rock art in North Arabia, the lance was particularly common among horsemen (e.g. Macdonald 1996: 78–79). The technique of hunting with a bow (Ar. *ramy*, *rimāya*), lance or spear is very common (Ibn Sallām 1985: 23–28).

In North Arabia, the camel seems to have been the main animal to be ridden when hunting (Macdonald 1990: 24–28). Good data are available from the Safaitic rock drawings (al-Khreyshah 2007: 9–28). By contrast, there is no suggestion from inscriptions that birds, such as the falcon, accompanied the hunters in pre-Islamic Arabia, although falconry became a favourite pastime in the Islamic period and has continued until today. In Yemen, falconry was favoured by the Rasulid rulers long after the Himyarite period (az-Zabīdī T. 1985: 45, 90–91; Viré 1986: 1152–1155). Cheetahs, lions, panthers and leopards were occasionally found in hunting scenes in ancient Yemen (see Fig. 1; az-Zabīdī T. 1985: 113–127).

Hunting dogs were quite common in ancient South and North Arabia. The South Arabian monuments show that dogs were employed in hunting in ancient Yemen (e.g. CIH 713, YM 1131, Nāmī 5, Robin-Kāniṭ 25). South Arabian inscriptions frequently mention the number of hunting dogs that accompanied a hunting expedition and give some information about those who trained them (Sima 2000: 102–108). There is, for example, a Sabaic grave stela that mentions a person whose profession is *klb* 'hound raiser' (Ar. *kallāb*, RES 3902 No. 43 = CSAI I, 810) (2000: 104–105). Such hunting hounds are well documented in the rock drawings of North and South Arabia. Fine depictions of hunting hounds can be found on several reliefs from ancient Yemen. In one hunting scene relief

[20] The *jambiya* dagger is mentioned in Sabaic as *s²zb* (Beeston *et al.* 1982: 137).

from the Yemeni Jawf (Fig. 17), a hunter in the central panel carries a bow and arrow and the head of an ibex. To the left is a hunting assistant and to the right a hunting dog attacking an ibex.

Hunting dogs occur in many Safaitic drawings, undoubtedly suggesting that dogs were widely used as hunting assistants. CSNS 550 shows two dogs chasing four gazelles. In addition, hunting scenes signed by Hismaic inscriptions provide valuable data on the use of hounds in the hunt (Fig. 18; Corbett 2010: 160–161).

There is detailed documentation available on hunting with dogs. The Assyrian and Egyptian monuments show that dogs were employed in hunting in the ancient East (Salonen 1976: 68–97; Keel 1997: 87–89). Arabic sources provide good information about the *salūqi* or Saluki, the most common hunting dog used by the Arabs. It is a member of the sighthound family, so-called because it chases its prey by sight, not scent. In the Arabic tradition, the *salūqī* is closely associated with the Yemeni town of Salūq (Kušāǧim 1954: 131–143; Smith 1995: 1001–1002).

Hunting organisation and hunting expeditions

Hunting was a well-prepared and organised undertaking. In ancient South Arabia, the organisation of a royal hunt was similar to that of a military expedition. We have



Fig. 17.
A hunting scene from the Yemeni Jawf, Ṣanʿāʾ National Museum (YM 1131).



Fig. 18.
A hunting scene showing an ibex and two hunters and hounds from Hismā, Jordan (courtesy G. Corbett).

several examples where the head of state directed the ritual hunt, including during the early Sabaic period when hunts were organised and carried out by the Sabaean ruler (*mukarrib*) himself. Later on, the kings of Sabaʾ, Himyar and the Hadramites organised royal or ritual hunting expeditions (see above). Likewise, tribal leaders, royal officials, governors and military leaders typically organised their own hunting journeys. Although South Arabian inscriptions usually do not provide details about the duration of such hunting expeditions, we know that at least one royal hunting expedition in Ḥaḍramawt lasted for twenty days (Ingrams 1).

From the first century CE onwards, the horse (Ar. *faras*, South Ar. *frs¹*, Safaitic *frs¹*) was important and widely used for hunting in North Arabia (Macdonald 1996: 72–83). This is well documented in Ancient South Arabian inscriptions (Robin 1996: 60–71) and the horse mainly beat and chased the game into the trapping area (ʿAbadān 1/39). The horse also appears prominently in pre-Islamic Arabian poetry (Bauer 1992).

Hunting seasons and hunting areas

Hunting was carried out at specific times and seasons during the year and primarily in specific areas that were known to be good hunting grounds. Unfortunately no detailed studies have been carried out concerning these issues for Arabia, although some data can be gained from pre-Islamic inscriptions (see below) and classical Arabic sources (aṣ-Ṣāliḥi 1981: 61–70).

Ancient hunters were probably aware of the migrations and movements of wild animals such as the gazelle. The

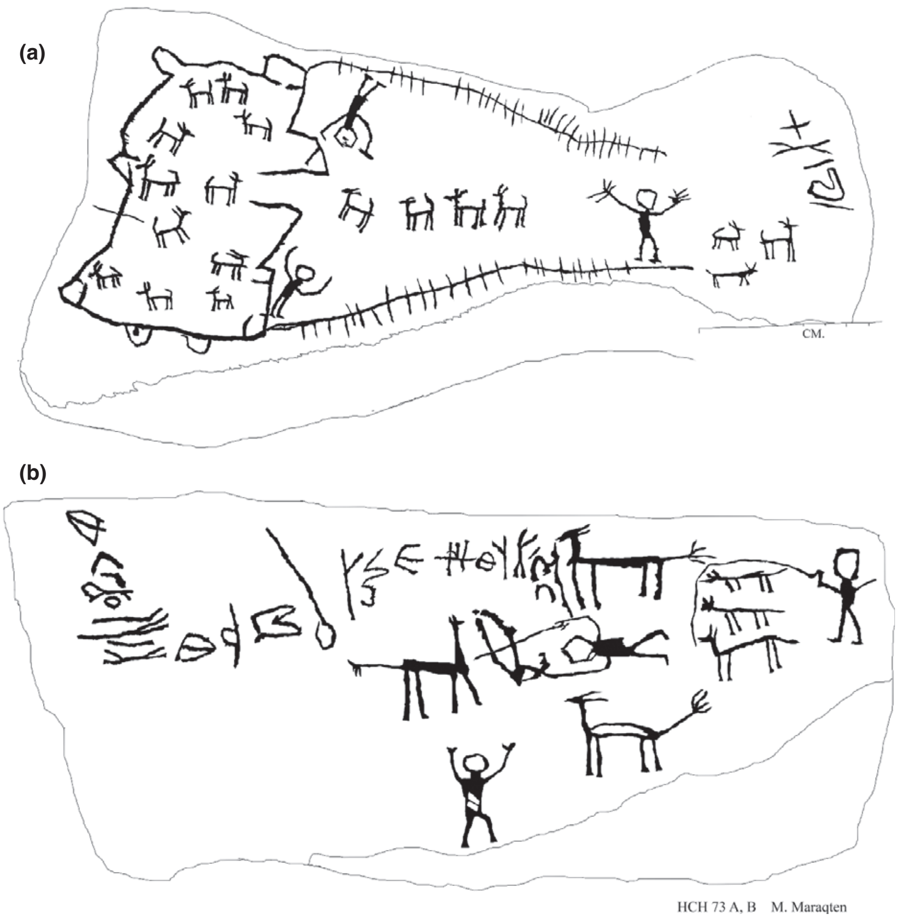


Fig. 19.
A drawing of the desert kite of Hāniʾ cairn, Jordan (HCH 73 A, B).

locations of desert kites, for example, prove they were purposefully constructed according to local topography and their proximity to water sources. Similarly, the location of known hunting areas was possibly dictated by weather, the migration patterns of game animals and the presence of seasonal pools and reservoirs where rainwater would collect, attracting animals that were hunted by humans. The Safaitic inscriptions provide valuable information about such activities (ʿAbbādī 2012: 102–123), while pre-Islamic and classical Arabic sources reference the most suitable times and seasons for hunting (Kušāǧim 1954: 235–240).

No accurate epigraphic data is available about hunting regions in ancient Yemen, but one Sabaic inscription mentions the term *ʾḥbṭ*, meaning ‘hunting enclave’ (Beeston *et al.* 1982: 65; see also Serjeant 1976: 34).

The ritual hunt for the deities ʿAthtar and Kirwam seems to have been practised in specific protected areas. These areas were called Aryadī and Dannum and are perhaps located today at Shiʿb ʿAql near Maʾrib (Beeston 1991: 49–57). Another area was called Rabyatum and Aʿlumān, mentioned in a Sabaic inscription from the Awām temple (MB 2005 I-16), possibly located north-west of Maʾrib and to be identified with the hunting areas discussed by U. Brunner (2008: 1–8). Naqīl aš-Šiǧāʿ, which is located *c.*40 km north-east of Ṣanʿāʾ, seems to have been an important traditional hunting ground. In the first century CE, it was the place where ritual hunt was performed for the gods ʿAthtar and Kirwam (Ry 544), and later in the fifth century CE, for the god Raḥmanān (MS Šiǧāʿ 1).

Several South Arabian inscriptions also mention hunting seasons (Haram 10 = CIH 547), and a particular season was dedicated to the ritual hunt of the sun-goddess (*ṣyd ḫnwn*), according to the sun-goddess hymn of Wadi Qāniyah (ʿAbdallāh 1988: 92). Of sig-

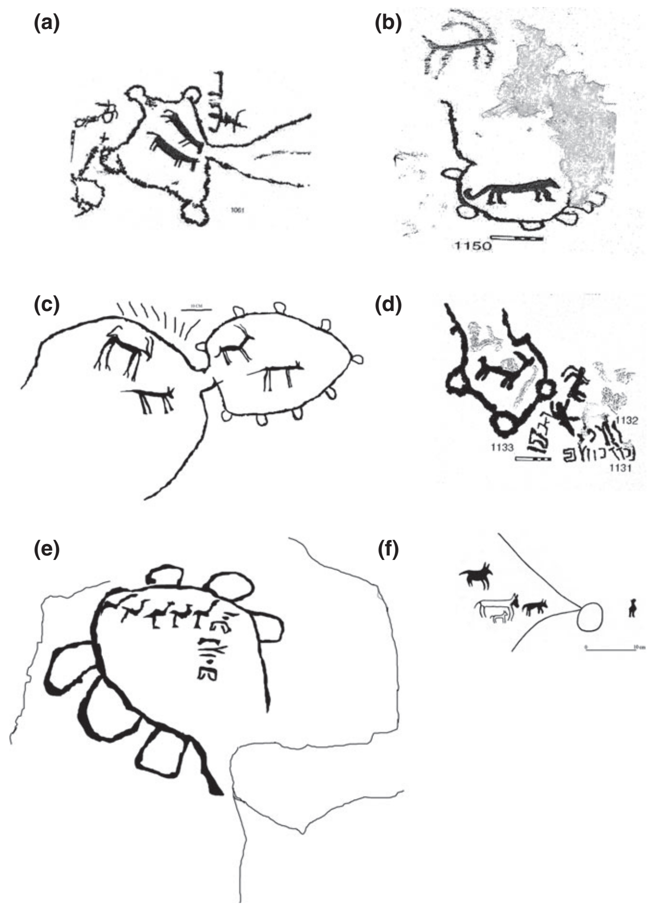


Fig. 20.
Drawings of desert kites: **a.** Wādī Derham Site 1, Jordan (Ababneh 2005: no. 1061); **b.** Wādī ʿAlyān, Jordan (Ababneh 2005: no. 1150); **c.** Jordan (Macdonald 2005: 340, drawing M. Maraqten); **d.** Wādī ʿAlyān, Jordan (Ababneh 2005: nos. 131–133); **e.** desert kite and ostriches (Betts & Helms 1986: pl. I, no. 3, drawing M. Maraqten); **f.** Sinai (Bar-Oz *et al.* 2011: 213).

nificance is the fact that there was a specific month for hunting in the Sabaean and Qatabanean calendar called *ḏ-ṣyd* (e.g. MAFRAY-al-Miʿsāl 4/12, YMN 15/5).

Trapping and desert kites

It is difficult to assess the hunting techniques that were practised in ancient Arabia. Hunting techniques and methods have been described, however, for the early Islamic period (see Kušāğim 1954, *al-Maṣāyid wa-l-Matārid*, 'Trapping and hunting game'), some aspects of which may have been preserved from the pre-Islamic period (Ibn Manglī 1984: 194). What follows is a brief presentation of ancient hunting techniques.

Still hunting

Various hunting practices were developed by the people of pre-Islamic Arabia. For the hunter, one of the most important seems to have been his behaviour towards the game, namely the practice of 'still hunting.' This involved the hunting of game by stalking or ambushing.[21]

Battue method

A popular technique of hunting is the 'battue' method (Ar. *muṭārada*). In pre-Islamic Arabia and continuing into the Islamic and medieval periods, the favoured method of hunting in Arabia, especially among princes and nobles, was the chase or 'battue' method (South Ar. *ṭrd*, see Abadān 1 above; Ar. *ṭard*, *muṭārada*, *ṭirād*). This was practised on foot as well as on horseback with the aid of hunting assistants, such as the hunting hound (*salūqī*), tamed cheetah (South Ar. *fhd*, Ar. *fahd*) or, in the Islamic period, the caracal lynx (*ʿināq al-arḍ*). The hunters frighten the game by beating the terrain, yelling loudly. The hunters are depicted in the rock art riding horses or camels and striking the game. The game is thus driven before them into a gorge, a stone structure or an enclosure of nets or prepared pit where it can be easily killed. This type of hunt is well documented with epigraphic evidence, Arabian rock art and classical Arabic sources (Ibn Manglī 1984).

Hunting nets

Another hunting method was the placing of nets (*šabak*). Using nets was known from ancient Egypt and seems to continue to have been known in ancient Yemen (Ryckmans J. 1976b: 161–165). Epigraphic evidence from the highland of Yemen proves that nets were used in hunting (RES 4176/6), since the term ns^3g 'drive game, trap with nets' is used (Beeston *et al.* 1982: 146). Hunting with nets in ancient Yemen can already be found in a ninth-century BCE hunting scene relief from the temple of Banāt ʿĀd (Antonini de Maigret 2012: 35–36; see above).

In some cases, a particular type of hunting net with a snare was used (*ḥibāla* = *maṣayada*, *aḥbūl*, *aḥbūla*; see Kušāğim 1954: 211; Lane: 506). This type required the use of ropes. Nets for hunting seem to have been used in ancient Oman (see the rock drawings in al-Šaḥrī 1994: 207, 213, 237–238). Recent archaeological excavations identified tethering stones that were used for net hunting in Oman during the seventh millennium BCE (al-Šaḥrī 1994: 229–230; ElMahi 2007: 37–62), while the method

[21] On traditional hunt techniques and practices, see Allen & Smith 1975: 108–147; aṣ-Ṣāliḥi 1981: 71–77.

is also referenced in pre-Islamic poetry (aṣ-Ṣāliḥī 1981: 189–190). In addition, a rock drawing of an ibex hunt from Dhofar appears to contain a representation of this hunting technique.

Desert kites/*maṣāyid*

The hunting of wild animals in the ancient Near East might be illustrated by the many desert kites spread throughout the deserts of the southern Levant and Arabia. Apparently hundreds of beasts could be caught in a single attempt, a successful way of hunting.

It should be pointed out that *maṣyada*/*miṣyada* (pl. *maṣāyid*) is a general term that has been used for all kinds of hunting methods, among them the so-called desert kites. For hunting game by land, the most common techniques and sets for the capture of animals are trapping pits, also called *maṣāyid*. There are various types. Among the trapping pits are deep pits dug into the terrain, or constructed from stone, in order to trap animals. Similar to cage traps they are regularly employed for snaring wild animals without hurting them. Some of the locations of the hunter pits are mentioned in the classical Arabic sources (Kušāǧim 1954: 241–242).

Desert kites are a type of *maṣāyid* associated with deep pits for trapping game. In the 1920s specific stone structures that were described as desert kites according to their shape, were first observed in the Jordanian (Kennedy 2012a: 145–155; Kempe & Al-Malabeh 2013: 126–146) and Syrian deserts (Picalause *et al.* 2004: 89–99). They are sizeable, V-shaped stone structures and large enclosure kites, constructed for the purpose of harvesting wild animals. They are found in a variety of landscapes: arid areas, mountains, steppe and desert. The kites are constructed of two extended converging short stone walls with a rounded corral at the end. The long stone walls, which are joined onto an enclosure, directed the animals to a location where they could be captured or killed. The circular enclosure of these kites occurs in sequence as part of the elongated attached wall. The rounded enclosure can measure from a few metres to dozens of metres in width, and the arms (walls) of the chain may extend for several hundreds of metres and possibly several kilometres. Usually, the walls of the chain are constructed of local stones and differ in thickness and height.[22]

Our knowledge has increased in the last two decades due to the efforts of several scholars and fieldwork undertaken on this issue. It has been noticed recently that a large diversity of desert kites occurs in south-western Asia, extending between Yemen and Armenia (Crassard *et al.* 2014). These well-preserved structures provide evidence of the enormous scale of wild animal hunting throughout history and of its consequences for the ancient setting and landscape of the Arabian Peninsula and Bādiyat al-Shām (Wilkinson 2003: 151–155, 178–179). The major targets for hunting in Bādiyat al-Shām as well as in other parts of Arabia were several types of gazelles, ibexes, Arabian oryx, onagers, ostriches and possibly wild camels.[23] A careful examination of the desert kites' plans and settings in relation to pastures and water localities, direction of wind and migration routes of beasts suggests that some of the desert kites were constructed for hunting a specific type of animal, which seems to have been gazelles.[24] Desert kites were built close to water sources and streams in wadis, taking advantage of the fact that these wild animals need to drink water giving the hunter the opportunity to drive them inside the kites. The hunters would divide themselves into different groups, one driving the beasts from behind in the direction of the enclosure of the kite, while other groups were located at strategic positions along the path to stop game from escaping. Good examples of the location of desert kites close to water sources and in the relation with Safaitic inscriptions are available in the Jordanian desert.[25]

In general, rock art and inscriptions as well as desert kites are frequently found near water sources such as rainwater pools, reservoirs, springs and wells and they also possibly occur in the vicinity of settlements and caravan routes.

Of significance are the desert kites of Bādiyat al-Shām, where many have been discovered in Syria, Jordan and Palestine. Huge desert kites, composed of long chains ranging up to tens of kilometres have been discovered in Jordan (Betts & Helms 1987: 41–67; Kennedy 2012a: 145–155; Kempe & Al-Malabeh 2013: 126–146).

The typology of kite shapes, which so far depend chiefly on the shape of the apexes, requires further investi-

[22] See the description of similar methods of hunting in modern times in Syria in Ǧabbūr 1988: 287–288.

[23] Hunting camels from the first century CE onwards is not certain, as has been demonstrated by Macdonald (1990: 24–28).

[24] Ǧ. Ǧabbūr (1988: 351–353) describes the ability of the *ṣlubah* nomads in modern times to take note of the direction of the wind as gazelles can detect hunters from their scent carried by the wind.

[25] Ṣ. ʿAbbādī (2012: 102–123) presented some of the Safaitic inscriptions in their relation to water sources in Wādī Salmā, in the Jordanian desert.

gation. Archaeological studies and recent analyses of Google Earth images of the Jordanian chain kites provide good data with regard to their mapping, typology, construction, topographic location in landscape and distribution patterns (Betts & Helms 1987: 41–67; Kempe & Al-Malabeh 2013: 126–146; Kennedy 2012a: 145–155; Nadel *et al.* 2013: 147–154). Few archaeological excavations have been carried out. These investigations will help the understanding of the function and dating of kites. Of interest are the current discoveries of hunting practices and desert kites in the southern Levant, the Negev and Wādī Araba (Bar-Oz *et al.* 2011: 208–215).

Archaeological investigations of kites in the Syrian Jazira have been carried out and recent analyses of Google Earth images undertaken (e.g. Picalause *et al.* 2004); and in Yemen (Brunner 1989: 23–25; 2008: 1–8), in Sinai and the Negev (Holzer *et al.* 2010: 1–12), as well as in Khaybar (Kennedy & Bishop 2011: 1284–1293) and Najran in Saudi Arabia (Ryckmans J. 1976b: 161–165).

In this study attention is drawn to the significance of the occurrence of the desert kites in rock art. No drawing of desert kites has yet been discovered in Yemen. In reliefs from the temple of Banāt ʿĀd in the Yemeni Jawf, however, drawings of hunting traps have been identified (Serjeant 1976: 3; ElMahi 2000: 40–45; Antonini de Maigret 2012: 27–31). Perhaps some drawings that have been discovered in Dhofar, Oman could be interpreted as hunting traps (ElMahi 2000: 40–45; al-Šaḥrī 1994: 181, 227).

Of significance are the rock drawings of desert kites that have been discovered in Jordan. Some of these drawings have been found in association with Safaitic inscriptions and examples of Safaitic drawings are shown (Fig. 19). One of the best preserved rock drawings of desert kites is the well-known cairn of Hāniʾ, associated with a Safaitic inscription discovered in Jordan and published by L. Harding (1953: 8–56; 1956: 82).[26] It should be pointed out that the function and interpretation of these drawings and the inscription of the cairn of Hāniʾ have been a topic of controversial debate (Macdonald 2005: 332–345; Kennedy 2012b: 488).

Two hunting scenes are depicted in the drawing. HCH 73 A represents a scene in which a flock of gazelles is being trapped in a kite, possibly with the aid of dogs; the gazelles are captured by three hunters waving their arms. The bottom scene B is a hunting episode. The hunted animals in HCH 73 B appear to be addax antelopes. Three hunters appear in the episode, one of them holding a bow and arrow. Both episodes relate to each other.

The drawing associated with the Safaitic inscription clearly testifies that the hunted animals were driven into an enclosure but recently, a significant study of the Safaitic desert kites rock drawings was accomplished by M.C.A. Macdonald (2005: 332–345). He discussed the drawings and the inscription HCH 73 associated with the cairn of Hāniʾ and suggested a new reading. He came to the conclusion that the drawings of the desert kite HCH 73 A might relate to the herding of goats (Fig. 19). On the other hand, the hunted animals here are gazelles. These frightened herds (*ʾnfr*) are depicted accurately in their natural situation. Their tails are held high as they are threatened.

Macdonald (2005: 336) reads the Safaitic text as follows: *l mnʾt w bny ʿl hnʾ w dmy h-s*^{2}*ḥt w h-ʾnfr* and translates ‘by Mnʾt and he built [the cairn] over Hnʾ and he drew the driving and the beating’. The key words for understanding the text are *s*^{2}*ḥt* and *ʾnfr*, which have been discussed in detail by Macdonald (2005: 334–336). The drawing of HCH 73 A bears the shape of a desert kite. The main enclosure has a rectangular shape and nine logettes are attached to the rectangular enclosure. The lengthened stone walls are attached to the rectangular enclosure which forms part of the structure. In the drawing of the attached walls engraved lines are drawn across the two walls as seen in HCH 73 A. These lines possibly represent the term *s*^{2}*ḥṭ* in the Safaitic inscription.

The precise meaning of the term *s*^{2}*ḥt* is difficult to determine.[27] Looking carefully at the photograph of the Hāniʾ cairn, however, the word *s*^{2}*ḥt* read by Macdonald should be corrected to *s*^{2}*ḥṭ* with / *ṭ* /. The term *s*^{2}*ḥṭ* might be interpreted according to the Arabic *šaḥṭ* as ‘piece of wood, a timber, pole, rod, post’ (az-Zabīdī M., *Tāǧ al-ʿArūs*, 19/ 400–401; cf. *šawḥaṭ* ‘certain trees, a species of the tree of the mountains’, Lane: 1513).

Using the term *s*^{2}*ḥṭ* ‘piece of wood’ might be understood as a noun in plural form **šiḥāṭ* ‘hedge, fence, fencing, enclosure’. If this interpretation is correct, then it would strengthen the possibility that the drawing of the Hāniʾ cairn (HCH 73 A and HCH 73 B; Fig. 19) in fact shows a

[26] A similar type of Hāniʾ desert kite has been identified; see Échallier & Braemer 1995: 42–43; Fowden 1999: 128–135. On the recent archaeological investigation of the cairn of Hāniʾ, see Kennedy 2012b: 489.

[27] I would like to thank Mr. Michael Macdonald for providing me with the photographs of the Hāniʾ cairn; the drawings were created from these photographs.

desert kite and not a domestic enclosure. Fencing and the use of pieces of wood could also relate to hunting nets.

Macdonald's reading (2005: 334–336) of the last word as *h-ʾnfr* is plausible, but *ʾnfr* is possibly a plural of *nfr* (Ar. *nafar*) meaning 'band, group (of animals), herd, drove, flock'. Since the basic meaning of *nafara* in stem II and stem IV is 'frighten, scare away, chase away, drive away' (Lane: 2823–2825; cf. also *dābbatun nāfirun* 'a beast that takes fright and runs away at random', Lane: 2825), the noun *h-ʾnfr* might be understood as the Arabic *musnatfara* 'the frightened herd, flock'. Thus the term *h-ʾnfr* is then similar to *ṭarīda* 'trapped, captured animal'. In this case the text: *l mnʾt w bny ʿl hnʾ w dmy h-s²ḥṭ w h-ʾnfr* might be translated as follows: 'this belongs to Mānīʾat and he built [the cairn] over Hāniʾ and he drew the enclosure and the frightened animals'.

Of significance are the so-called logettes (deep pits) that occur in the drawing of the Hāniʾ cairn desert kite. These are one of the most important features of the desert kites in general, and occur in other desert kite drawings (Fig. 20). These logettes are described in the Arabic sources as belonging to the gazelle *Maṣāyed* and are called *ʾābār* (sing. *biʾr*, lit. 'well, cistern', i.e. 'deep pits'). It is an important contention that the drawing of the cairn of Hāniʾ was a hunting trap and not an enclosure for domestic animals. Another drawing with a desert kite (Échallier & Braemer 1995: 60) shows a similar shape (Fig. 20/c). Thus, three arguments speak for the drawing of Hāniʾ cairn to be considered as a desert kite: the frightened animals, the logettes and the *s²ḥṭ* 'fence, enclosure'.

On the function and dating of desert kites

Several studies have been dedicated to the issue of the function of desert kites, whether they have been used for hunting or animal herding (see discussion in Macdonald 2005: 332–333). Numerous hypotheses in regard to the function of desert kites have been suggested since the 1920s. Two ideas on their function have been most favoured, that the kites were hunting ambushes or that they were used for pastoral enclosures. Although some scholars consider that the kites were created by pastoralists primarily in order to seize and possibly hold herds (see discussion in Fowden 1999: 107–136; Échallier & Braemer 1995: 35–63; Macdonald 2005: 332–345; Kennedy 2012a: 145–155), desert kites should be considered as hunting traps. Recent discoveries and several studies prove that desert kites clearly demonstrate that hunting was the sole function of these constructions (Crassard *et al.* 2014).[28]

The Safaitic inscription mentions four terms meaning 'enclosures of domestic animals, sheepfold, sheep pen': these are: *ṯyt* (WH 1282, 3534c), *ẓrt* (WH 3112a, 3186, ISB 33), *ẓyrt* (WH 3208a), *zrb* (Ababneh 2005: no. 651) and *ṣr* (SIJ 181; see *ṣīra* in Syrian and Palestinian Arabic). These terms were possibly applied to the desert kites in the early centuries CE and in particular the term *ṣr*. Ibn Manglī mentioned that *ṣiyar* (sing. *ṣīra*) were enclosures constructed of walls on the mountains and used for hunting (Ibn Manglī 1984: 191). This is a clear description of the desert kites and proves some of the hunting technique. The other Safaitic term that was applied is possibly *s²ḥṭ* that was used in the drawing of the desert kite of the cairn of Hāniʾ (see above). Of significance is the description of desert kites by Ibn Manglī (died 1384 CE). He states:

> *Wa-qīla ʾawwal man ʿamala l-maṣāʾid waṣ-ṣiyar li-ṣaydi l-ġazāli, malikun kāna qad ǧamaʿa l-waḥša fī maḍīqin fa-lazza l-ġazāla fīhi, wa-kāna hunāka makānun munḫasifun kal-biʾri, fa-ṣāra l-ġazālu yaqfizu ḏālika l-makāna, fa-yaqaʿu fī tilka l-biʾri ʾilā ʾan ṣāra fīhi ġazālun kaṯīrun, fa-qāla al-maliku: law ʿamalnā miṯla hāḏā la-waqaʿa fīhi l-ġazālu, fa-ʾamara man yaʿmalu lahu miṯla ḏālika mina ṣ-ṣiyari waz-zawāyā, fa-ḥufirat fīhi al-ʾābāru, wa-rufiʿat ḥīṭānun wa-hiya al-maṣāʾidu* (Ibn Manglī 1993: 217–218).
>
> '(...) car le peu de montagnes et la rareté des pierres y interdistait l'installation d'enclos-pièges à fosses (*miçyada*, pl. *maçâyid*). D'autre part, on a dit que ces enclos forcés avaient été conçus d'après le panneau en mailles de filet lui-même.
>
> De même, on a raconté que le premier à avoir édifié, en dur, un enclos-piège fut un roi qui avait rabattu des hardes de gazelles en une passe très étroite et les y talonnait. Or, le couloir était barré par une profonde

[28] See also the critical review by Échallier & Braemer 1995: 35–63 and by Rosen & Perevolotsky 1998: 107–111. No studies of desert kites are as yet available in Arabic, but a well-illustrated volume of many desert kites from Yemen to Jordan was published by ʿA. aš-Šāyiʿ (2009). It contains very good photographs of the desert kites of Yemen (2009: 94–95), Dhofar (2009: 62, 132–133), Mecca (2009: 90) and north-west Saudi Arabia (2009: 156–170), among other places. The author who visited the sites interprets the desert kites as markers of trading routes.

excavation semblable à un puits et les gazelles, contraintes de la sauter, y tombèrent en grand nombre. A ce spectacle, le roi dit: "Pourquoi ne creuserions-nous pas de semblables trous pour y faire tomber les gazelles?" Et de son désir aussitôt exécuté, naquirent les enclos forcés (*çîra* pl. *çiyar*) qui, lorsqu'on y creusa des fosses, prirent nom de *maçâyid* "enclos-pièges à fosses", et que l'on cerna de murs.' (Ibn Manglī 1984: 194).

Ethnographic data gained from early travellers' accounts document that some of these traps were still used at the turn of the nineteenth and twentieth centuries (Musil 1928: 26–27; Ǧabbūr 1988: 287–288; Betts & Helms 1987: 62–63; Fowden 1999: 107–136). Of interest is the description of animal trapping in the pre-Islamic Arabian hunting poem *ṭaradiyya* and in other works (Kušāǧim 1954; Stetkevych 1996: 102–118; Seidensticker 2000: 223–224).

Although scholars have difficulties providing accurate dates for the desert kites in the ancient Near East, it appears that they already existed in the Neolithic period, when monumental constructions were started (Bar-Oz & Nadel 2013: 1–7; Brunner 2008: 1–8). Similar hunting traps continued into pre-modern times until approximately the middle of the twentieth century (Ǧabbūr 1988: 284–297; Fowden 1999: 107–136).

Conclusion

This study has surveyed the evidence for hunting in North and South Arabia during the pre-Islamic period using an interdisciplinary approach. It proves that there is a vast body of material concerning hunting practices in pre-Islamic Arabia and that it is difficult to achieve a survey of this topic for the whole of the Arabian Peninsula. It illustrates, however, an important socio-economic sector of everyday life for the people of pre-Islamic Arabia. This study has proved that hunting was an important institution in ancient Yemen and showed that ritual hunting was practised from the early Sabaean period (*c.* eighth century BCE) until the fifth century CE.

This topic needs to be studied by an interdisciplinary group of scholars. For example, the epigraphic evidence should be studied in tandem with the perspective of zoologists since many of the hunted animals have since disappeared from Arabia. Furthermore, this study suggests a new reading of the key word for understanding the Safaitic inscription of the Hāniʾ cairn, which has allowed a proper interpretation of the Hāniʾ inscription and drawing. It offers the possibility that this drawing represents a desert kite and should be considered as a hunting trap.

Desert kites were structures that served primarily to drive and capture game. Although some of them might in some cases have been used for pastoral tasks, people do not need enclosures of hundreds of metres- or several kilometres-long wall structures to keep their domesticated animals.

Abbreviations and sigla

AFSM	American Foundation for the Study of Man.
CIAS	Inscriptions in *Corpus des inscriptions et antiquités sud-arabes.* Louvain: Peeters, 1977–1986.
CIH	*Corpus inscriptionum semiticarum.* Pars IV. *Inscriptiones ḥimyariticas et sabaeas continens.* Paris: Reipublicae Typographeo, 1889–1932.
CIS	*Corpus inscriptionum semiticarum.* Pars V. *Inscriptiones Safaiticae*. Paris: Imprimerie nationale, 1950–1951.
CSAI	Corpus of South Arabian Inscriptions, http://dasi.humnet.unipi.it/
CSNS	Inscriptions and drawings in Clark 1979.
EI	*The Encyclopaedia of Islam.* (2nd edition). Leiden: Brill.
Eryani	Inscriptions in al-Iryānī 1990.
HCH	Safaitic inscriptions and drawings in Harding 1953.
Ingrams 1	Inscription published in CSAI.
I	Inscription.
Ir	Inscriptions in al-Iryānī 1990.
ISB	Safaitic inscriptions and drawings in Oxtoby 1968.
Ja	Sabaean inscriptions published in Jamme 1962.
Ja 949	Inscription in Jamme 1963.
Lane	Lane 1863–1893.
Lisān	Ibn Manẓūr 1955–1956.
LP	Inscriptions and drawings in Littmann 1943.
MB	Registration siglum of inscriptions discovered by the American Foundation for the Study of Man excavations at Maḥram Bilqīs (1998–2006).
RES	*Répertoire d'Epigraphie Sémitique*. Paris: Imprimerie nationale, 1914–.
Ry	Inscriptions published by G. Ryckmans.
Ry 544	Inscription in Ryckmans 1957.
SIJ	Safaitic inscriptions and drawings in Winnett 1957.
WH	Safaitic inscriptions and drawings in Winnett & Harding 1978.
YM	Yemen Museum.

For further abbreviations, sigla and a bibliography of the cited inscriptions see Kitchen 2000 and CSAI = Corpus of Ancient South Arabian Inscriptions (http://dasi.humnet.unipi.it/).

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